Boston College Law Review

Volume 39
Issue 3 *Symposium Conference On Discovery Rules*

Article 2

5-1-1998

An Empirical Study of Discovery and Disclosure Practice Under the 1993 Federal Rule Amendments

Thomas E. Willging

Donna Stienstra

John Shapard

AN EMPIRICAL STUDY OF DISCOVERY AND DISCLOSURE PRACTICE UNDER THE 1993 FEDERAL RULE AMENDMENTS

THOMAS E. WILLGING, DONNA STIENSTRA, JOHN SHAPARD AND DEAN MILETICH*

I. BACKGROUND

Within the realm of court-related research, there is now a substantial record of empirical research on proposals to reform discovery. This Article is the most recent of many that have tried to shed light on how discovery works. Among the substantial efforts that precede and, indeed, provide a comparative baseline for our report are: Columbia University's Project for Effective Justice, from the 1960s,[1] the Federal Judicial Center's ("FJC") District Court Study Series volume on discovery, from the 1970s,[2] and the University of Wisconsin's Civil Litigation Research Project,[3] published in the early 1980s. Elsewhere in this vol-

---

* The authors are staff members of the Research Division of the Federal Judicial Center. It is important to note that on matters of policy the Federal Judicial Center speaks only through its Board. This study was undertaken in furtherance of the Center's statutory mission to conduct and stimulate research for improving the administration of justice. The views expressed, however, are those of the authors.

The core of this Article was presented as a report to the Advisory Committee on Civil Rules at its September 4–5, 1997 meeting and conference at Boston College Law School. That report, plus an addendum containing an October 1997 memorandum to the Committee, was published by the Federal Judicial Center. *See* THOMAS E. WILLGING ET AL., FEDERAL JUDICIAL CTR., DISCOVERY AND DISCLOSURE PRACTICE, PROBLEMS, AND PROPOSALS FOR CHANGE (1997). In the current Article, the authors integrate the analyses that were presented separately in those two reports to the Advisory Committee. The current Article also contains additional, unpublished analyses presented to the Committee during the early stages of its rule-drafting process in the winter of 1997–1998.

We acknowledge the valuable assistance of several colleagues: Joe Cecil, George Cort, Melissa Day, Yvette Jeter, Pat Lombard, Naomi Medvin, Jackie Morson, Aletha Janifer, David Rauma, Elizabeth Wiggins, and Carol Witcher.

[1] *See generally* WILLIAM A. GLASER, PRETRIAL DISCOVERY AND THE ADVERSARY SYSTEM (1968) (studying discovery activity by surveying attorneys for plaintiffs and defendants in a sample of 910 terminated civil cases in 37 federal districts and by interviewing a subset of lawyers in six of those districts).

[2] *See generally* PAUL R. CONNOLLY ET AL., FEDERAL JUDICIAL CTR., JUDICIAL CONTROLS AND THE CIVIL LITIGATIVE PROCESS: DISCOVERY (1978) (studying discovery activity by examining case records for 3000 closed civil cases in six federal district courts and by a random telephone survey of a sample of lawyers in those cases).

[3] *See generally* David M. Trubek et al., *The Costs of Ordinary Litigation*, 31 UCLA L. REV. 72

ume,[4] our colleagues Judith McKenna and Elizabeth Wiggins review these and other empirical studies, while Professor Richard Marcus describes the rulemaking activities to which much of this empirical research relates.[5]

Early in 1997, the Advisory Committee on Civil Rules ("Committee") asked the FJC to conduct research on discovery as part of a Committee decision to undertake a comprehensive examination of that subject. We reported our findings to the Committee at a conference at the Boston College Law School in September 1997. Additional analyses were presented to the Committee between October 1997 and February 1998.

Notably, the Committee requested this research *before* drafting proposals for change. This call for research appears to be part of a growing practice of asking empirical questions before embarking on rule changes that will entail a major investment of bench, bar, and litigant resources.[6] In recent years, several commentators have urged rulemakers, sometimes quite strongly[7] and elaborately,[8] to use empirical research to assist them in identifying procedural changes that are needed and that promise to be effective.

(1983) (studying the costs of litigation, including discovery, in 1649 cases in five federal district courts and five state courts in the same districts by examining case records and interviewing 1812 lawyers from those cases).

[4] *See generally* Judith A. McKenna & Elizabeth C. Wiggins, *Empirical Research on Civil Discovery*, 39 B.C. L. REV. 785 (1998) (reviewing empirical literature about discovery under the Federal Rules of Civil Procedure and state discovery rules from 1968 to 1997).

[5] *See generally* Richard L. Marcus, *Discovery Containment Redux*, 39 B.C. L. REV. 747 (1998) (reviewing proposals to reform the discovery rules during the last 20 years).

[6] *See, e.g.*, Edward H. Cooper, *Rule 23: Challenges to the Rulemaking Process*, 71 N.Y.U. L. REV. 13, 42–52 (1996); *see also* FED. R. CIV. P. 11 advisory committee notes to 1993 amendments (citing four empirical reports on the 1983 version of Rule 11).

[7] *See, e.g.*, Stephen B. Burbank, *Ignorance and Procedural Law Reform: A Call for a Moratorium*, 59 BROOK. L. REV. 841, 841–42 (1993) (calling for a moratorium on rulemaking until more empirical research to support the rulemaking process is conducted). *Cf.* Richard L. Marcus, *Of Babies and Bathwater: The Prospects for Procedural Progress*, 59 BROOK. L. REV. 761, 769–70, 794–800 (1993) (discussing the problem of "empirical uncertainty" and examining the 1983 and 1993 amendments to Rule 11 as an example of how empirical work can profitably inform the rules amendment process).

[8] *See* Laurens Walker, *A Comprehensive Reform for Federal Civil Rulemaking*, 61 GEO. WASH. L. REV. 455, 464, 476–84 (1993) (calling on civil rulemaking bodies to study the costs and benefits of potential rules changes, to have costs and benefits of proposed changes reviewed by an independent judicial branch agency modeled on the executive branch's Office of Management and Budget ("OMB"), and to replace the rationalistic and intuitive approach to civil rulemaking with an empirical approach); *see also* Marcus, *supra* note 5, at 778 (noting that "[a]n empirical element is intrinsic to much rulemaking, but often it is difficult to develop an adequate empirical base," that empirical support for rulemaking has received increased academic attention in recent years, and that "[w]hile appreciating the need for empirical input, one needs to realize also that there are limits to what can be learned in this fashion").

Empirical research about discovery in civil litigation has yielded results that differ from the conventional wisdom, which claims that discovery is abusive, time-consuming, unproductive, and too costly.[9] In contrast to this picture of discovery, empirical research over the last three decades has shown consistently that voluminous discovery tends to be related to case characteristics such as complexity and case type,[10] that the typical case has relatively little discovery, conducted at costs that are proportionate to the stakes of the litigation,[11] and that discovery generally—but with notable exceptions—yields information that aids in the just disposition of cases.[12] The results of the FJC study reported in this Article are, for the most part, consistent with those findings.

Much of what is new in this Article relates to the use of initial disclosure and expert disclosure under the 1993 amendments to the Federal Rules of Civil Procedure ("Rules"). Unlike other aspects of discovery touched on in this Article, disclosure under Rule 26 has been the subject of little empirical research. The RAND Institute for Civil Justice's ("RAND") research on voluntary and mandatory disclosure addresses similar issues, but, as RAND researchers point out, their "sample cases were selected well before the revised Rule 26(a)(1) went into effect," and they "could not use [their] data to evaluate that rule."[13] Another study, based on a survey of its members by the American Bar Association's ("ABA") Section of Litigation in January 1995, was done before respondents had much experience with the 1993 amendments.[14] Nor was empirical research conducted on disclosure

---

[9] *See* Linda S. Mullenix, *The Pervasive Myth of Pervasive Discovery Abuse: The Sequel*, 39 B.C. L. REV. 683, 684 (1998) (referring to calls for discovery reform "typically impelled by anecdotal evidence and rhetorical, but highly compelling, reports of discovery abuse"). *See generally* Linda S. Mullenix, *Discovery in Disarray: The Pervasive Myth of Pervasive Discovery Abuse and the Consequences for Unfounded Rulemaking*, 46 STAN. L. REV. 1393 (1994).

[10] *See* McKenna & Wiggins, *supra* note 4, at 791 ("both discovery incidence . . . and discovery volume . . . are generally related to case complexity, with complexity evidenced by various case characteristics").

[11] *See id.* at 793 ("Some studies have found both discovery incidence and volume to be related to the stakes of the case.").

[12] *See id.* at 794 (In the Columbia project, more than three-fourths of the attorneys thought that discovery helped achieve a just disposition; one percent thought it hindered such a disposition. On the other hand, another study found frequent failure to uncover arguably significant evidence, especially in high stakes cases.).

[13] JAMES S. KAKALIK ET AL., RAND INST. FOR CIVIL JUSTICE, DISCOVERY MANAGEMENT: FURTHER ANALYSIS OF THE CIVIL JUSTICE REFORM ACT EVALUATION DATA § III(F)(2) (1998), *reprinted in* 39 B.C. L. REV. 613, 666 (1998) [hereinafter RAND REPORT] (in this issue).

[14] *See* KATHLEEN L. BLANER ET AL., AMERICAN BAR ASS'N, MANDATORY DISCLOSURE SURVEY: FEDERAL RULE 26(A)(1) AFTER ONE YEAR ES1–2 (1996) (reporting results of a survey on disclosure activity during 1994). In addition to the serious limits that arise from being conducted a

practices authorized by local rules prior to the adoption of Rule 26.[15] Regarding disclosure under Rule 26(a)(1), we write on what is, in effect, a clean slate.

II. Research Questions

To direct the Committee's reexamination of discovery, the chair, Judge Paul V. Niemeyer of the Fourth Circuit Court of Appeals, created a Discovery Subcommittee and appointed as its chair Judge David F. Levi of the District Court for the Eastern District of California. Among other tasks, the Subcommittee developed the questions the FJC should study and worked with the FJC in designing the research. Professor Edward H. Cooper, Committee Reporter, and Professor Richard L. Marcus, Discovery Subcommittee Reporter, collaborated with the FJC on that effort. In response to the Committee's request and in consultation with the Subcommittee, the Center determined that a national survey of counsel in closed federal civil cases would address many of the Committee's questions.

This Article presents findings from a national survey of attorneys who responded to a questionnaire mailed on May 1, 1997 to 2000 attorneys in 1000 closed civil cases. We sampled from cases likely to have discovery, excluding cases such as Social Security appeals, student loan collections, foreclosures, default judgments, and cases that were terminated within sixty days of filing. Questionnaires were returned by 1178 attorneys, a response rate of 59%. The cases in which respondents were involved appear to be representative of the sample as a whole.[16]

---

little more than a year after the December 1, 1993 effective date of the disclosure amendments, the study has other limitations that do not permit its findings to be generalized to all attorneys. In fact, the authors state that they "did not structure this study to be statistically valid." *Id.* at 6. The questionnaire recipients were limited to members of the ABA's Section of Litigation. *See id.* The reported response rate was 4.5%. *See id.* at 24–25. A disproportionate percentage (65%) of the responses were from attorneys who identified themselves as defense attorneys. *See id.* at 33. Thus, the results do not seem to be representative of the Section of Litigation nor of attorneys nationally.

[15] *See* Linda S. Mullenix, *Hope Over Experience: Mandatory Informal Discovery and the Politics of Rulemaking*, 69 N.C. L. Rev. 795, 811–20 (1991) (describing the limited information that was available to the Advisory Committee about "informal discovery" and concluding that additional investigation was warranted).

[16] See Appendix for information concerning the sample and its representativeness, as well as a discussion of the study's methodology. The questionnaire used to survey the attorneys for this study may be found at Thomas E. Willging, et al., Federal Judicial Ctr., Discovery and Disclosure Practice, Problems, and Proposals for Change app. B (1997).

The Committee's interests covered four broad areas of inquiry: (1) How much discovery is there and how much does it cost? (2) What kinds of problems occur in discovery and what are their costs? (3) What has been the effect of the 1993 amendments to the federal rules governing discovery?[17] (4) Is there a need for further rule changes and if so, what direction should they take? This Article provides information in response to the following specific questions derived from these four general topics:

1. What kinds of discovery do attorneys use?

2. How much does discovery cost the parties? What are its costs relative to total litigation costs, to the amount at stake, and to the information needs of the case? What factors are related to the total cost of litigation?

3. How often do problems arise in discovery? What kinds of problems arise? Do problems arise more often in particular types of cases?

4. What proportion of discovery expense is due to discovery problems?

5. What factors are related to litigation duration?

6. With what frequency is initial disclosure used? What are its effects? What kinds of problems arise in initial disclosure?

7. With what frequency is expert disclosure used? What are its effects? What kinds of problems arise in expert disclosure?

8. With what frequency are the other 1993 discovery amendments used (i.e., meet-and-confer requirements, discovery planning, limits on deposition conduct, and limits on interrogatories and depositions)? What are their effects?

9. With what frequency does document production occur? What kinds of problems arise in document production?

10. What are the expenses for specific discovery activities, and how do those activities relate to total litigation costs and case duration?

---

[17] The relevant 1993 amendments were to Rule 26 (creating a duty to disclose specified initial information, expert reports, and pretrial materials; altering the time for commencing discovery; authorizing courts to impose limits on discovery that is duplicative, readily available otherwise, or more burdensome than beneficial); Rule 30 (limiting the number of depositions per side; limiting objections and instructions not to answer deposition questions; authorizing local limits on the length of an individual deposition); Rule 32 (allowing objections to admissibility of deposition testimony to be raised at trial); Rule 33 (limiting number of interrogatories; clarifying duty to respond fully to interrogatories; requiring objections to interrogatories to be stated with specificity); Rule 34 (changing the timing of Rule 34 requests to conform with disclosure timing; clarifying the duty to respond to unobjectionable parts of a request); and Rule 37 (adding sanctions for failure to disclose, including a self-executing sanction prohibiting the use of witnesses or information not disclosed).

11. What attorney-related factors are associated with discovery problems, litigation costs, and case duration? To what extent are discovery problems due to judicial case management?

12. Is nonuniformity in the disclosure rules a problem?

13. What changes would be most likely to reduce discovery expenses? If change is necessary, what direction should it take? Should change occur now or later?

III. Summary of the Research Findings

Set out below are the questions posed by the Committee, along with short answers derived from the research. More detailed findings are reported in Section IV. In most instances, the findings are reported by individual attorney responses, not by case.

1. *What Kinds of Discovery Do Attorneys Use?*

The Rules have traditionally regulated the conduct of discovery according to the type of discovery activity used—e.g., depositions, document production, and interrogatories.[18] Thus, we began our analysis by determining what kinds of activities take place in the context of the discovery rules and what kinds of problems arise in using discovery.

Because our sample was drawn from cases likely to have discovery, it is not surprising that 85% of the attorneys said some discovery activity had occurred in their case. This includes discovery planning, as well as formal discovery or disclosure. Of the 85% of attorneys who reported some discovery activity, 94% of the attorneys reported engaging in formal discovery.

The most frequent form of discovery activity was document production: 84% of those who said there was some discovery or disclosure in their case said they engaged in document production. Interrogatories and depositions also occurred at relatively high rates: 81% and 67% respectively. Fifty-eight percent (58%) of the attorneys reported that initial disclosure occurred in their case, and 29% said expert disclosure did. Nearly two-thirds of those who engaged in formal discovery or disclosure also informally exchanged discoverable information without being required by rule to do so.

---

[18] *See, e.g.*, Fed. R. Civ. P. 30(a)(2) (limiting depositions); Fed. R. Civ. P. 33(a) (limiting interrogatories).

2. *How Much Does Discovery Cost the Parties? What Are Its Costs Relative to Total Litigation Costs, to the Amount at Stake, and to the Information Needs of the Case? What Factors Are Related to the Total Cost of Litigation?*

Of longstanding concern has been the cost of discovery and the relationship of that cost to the overall cost of litigation and the amount at stake in the case. Anecdotal information—and the occasional horror story—suggests that discovery expenses are excessive and disproportionate to the informational needs of the parties and the stakes in the case. Our research suggests, however, that for most cases, discovery costs are modest and perceived by attorneys as proportional to parties' needs and the stakes in the case.

A. Discovery Expenses Generally

We found that the median total cost of litigation reported by attorneys in our sample was about $13,000 per client. This reflects all costs that flow through the attorney—e.g., fees, transcript costs, expert witness fees, and the like, but not costs incurred separately by the client. About half of this cost was due to discovery. The proportion of litigation costs spent on discovery differed little between plaintiffs and defendants.

B. Discovery Expenses Relative to Stakes

Discovery expenses were quite low relative to the amount at stake in the litigation. The median percentage was 3% of the stakes, but a small percentage of attorneys (5%) estimated discovery expenses at 32% or more of the amount at stake. About half the attorneys thought the expenses of discovery and disclosure were about right in relation to their client's stakes in the case, but 15% thought the expenses were high and 20% said they were low relative to the stakes.

C. Discovery Relative to Information Needs

Most attorneys—representing plaintiffs and defendants alike—thought the discovery or disclosure generated by the parties was about the right amount needed for a fair resolution of their case. Fewer than 10% thought the process generated too little information, and about 10% thought the process generated too much information.

D. Factors Related to Total Litigation Costs

What explains the cost of a case? In this study we found that the size of the monetary stakes in the case had the strongest relationship to total litigation costs of any of the case characteristics we studied. Litigation costs were also directly related to the *percentage* of litigation costs attributable to document production, the number of hours spent in depositions, the size of the law firm, and the complexity and contentiousness of the case, with litigation costs increasing as each of these other characteristics increased. Litigation costs were related as well to the type of case.

3. *How Often Do Problems Arise in Discovery? What Kinds of Problems Arise? Do Problems Arise in Particular Types of Cases?*

Over the past decade, considerable concern has developed over what are perceived to be widespread problems with discovery. In our sample, 48% of the attorneys who used discovery or disclosure reported one or more problems. Of those who reported problems, 44% said problems occurred in document production, 37% said they occurred in initial disclosure, 27% said they occurred in expert disclosure, and 26% said they occurred in depositions. When attorneys reported problems in one discovery activity, such as depositions, they often reported problems in other discovery activities, particularly document production.

Attorneys in tort and civil rights cases were more likely to report discovery problems than attorneys in contracts or "other" cases. Both the likelihood of problems and the total incidence of problems increased as stakes, factual complexity, and contentiousness increased.[19]

4. *What Proportion of Discovery Expense Is Due to Discovery Problems?*

About 40% of the attorneys reported unnecessary discovery expenses due to discovery problems. Where unnecessary expenses were reported, they amounted to about 19% of total discovery expenses; overall about 4% of litigation expenses are attributable to discovery problems.

---

[19] Throughout the Article we will refer to "complex" and "contentious" cases, by which we mean cases rated by the attorneys as complex or contentious. We are reporting the attorneys' subjective assessments of their case, not an objective measure, but in the interests of readability we use the shorthand "complex case" and "contentious case."

The *percentage* of unnecessary discovery expenses attributed to problems was fairly constant at each level of discovery expenses, suggesting that the higher incidence of problems and greater absolute cost of discovery in larger or more complex cases may simply be in proportion to the greater amount of discovery in such cases.

5. *What Factors Are Related to Litigation Duration?*

The stakes in the litigation were positively correlated with the length of the case: the higher the stakes, the longer the case lasted. Disposition time was shorter in cases in which attorneys reported that initial disclosure had taken place pursuant to a local or national rule or a judge's order, though not when disclosure was voluntarily undertaken.

Disposition times were also related to the attorney's billing method. Cases in which the attorney reported billing on an hourly basis took longer than other cases.

We were unable to detect any relationship between the time permitted for discovery ("discovery cutoff") and the duration of a case. This finding, which differs from RAND's finding on the same point, suggests that altering discovery cutoffs may not reduce litigation disposition time.

6. *With What Frequency Is Initial Disclosure Used? What Are Its Effects? What Kinds of Problems Arise in Initial Disclosure?*

The most controversial of the 1993 amendments is the revision of Rule 26(a)(1), which permits each district to determine whether to require attorneys to disclose specified types of information early in the litigation without formal requests from opposing counsel.[20] The rule

---

[20] FED. R. CIV. P. 26(a)(1) provides:

(a) Required Disclosures; Methods to Discover Additional Matter.

(1) Initial Disclosure. Except to the extent otherwise stipulated or directed by order or local rule, a party shall, without awaiting a discovery request, provide to other parties:

(A) the name and, if known, the address and telephone number of each individual likely to have discoverable information relevant to disputed facts alleged with particularity in the pleadings, identifying the subjects of the information;

(B) a copy of, or a description by category and location of, all documents, data compilations, and tangible things in the possession, custody, or control of the party that are relevant to disputed facts alleged with particularity in the pleadings;

(C) a computation of any category of damages claimed by the disclosing party, making available for inspection and copying as under Rule 34 the documents or other evidentiary material, not privileged or protected from disclosure, on which

drafters intended to achieve a number of outcomes, including less formal discovery, lower litigation costs, and earlier disposition of the case.[21] Because Rule 26(a)(1) permits districts, as well as attorneys by stipulation, to opt out of the rule, it is unclear how many cases have actually been subject to the rule, much less what its impact has been.

A. Frequency of Initial Disclosure

We found that over half of the attorneys (58%) who engaged in some discovery or disclosure either provided or received initial disclosure in their case. The vast majority of attorneys (89%) who reported that initial disclosure occurred in their case also reported other types of discovery, indicating that initial disclosure seldom replaces discovery entirely.

Given the unexpectedly high incidence of initial disclosure, we examined whether the cases in our sample might overrepresent the amount of disclosure. We concluded that they do not, but we also found, surprisingly, that more than a third of the attorneys in our sample who had engaged in initial disclosure had litigated their case in a district classified as having opted out of Rule 26(a)(1)'s requirements. These data, together with the finding that 58% of cases with some discovery also involved disclosure, suggest that initial disclosure requirements may be more prevalent than some believe.

B. Effects of Initial Disclosure

In general, initial disclosure appears to be having its intended effects. Among those attorneys who believed there was an impact, the

---

such computation is based, including materials bearing on the nature and extent of injuries suffered; and

(D) for inspection and copying as under Rule 34 any insurance agreement under which any person carrying on an insurance business may be liable to satisfy part or all of a judgment which may be entered in the action or to indemnify or reimburse for payments made to satisfy the judgment.

Unless otherwise stipulated or directed by the court, these disclosures shall be made at or within 10 days after the meeting of the parties under subdivision (f). A party shall make its initial disclosures based on the information then reasonably available to it and is not excused from making its disclosures because it has not fully completed its investigation of the case or because it challenges the sufficiency of another party's disclosures or because another party has not made its disclosures.

FED. R. CIV. P. 26(a)(1).

[21] In its official notes, the Committee stated that a "major purpose of the revision is to accelerate the exchange of basic information about the case and to eliminate the paper work involved in requesting such information . . . ." FED. R. CIV. P. 26(a) advisory committee notes to the 1993 amendment. The drafters also refer to the fact that experience in a few state and federal courts indicates that "savings in time and expense can be achieved, particularly if the litigants meet and discuss the issues in the case as a predicate for the exchange . . . ." *Id.*

effects were most often of the type intended by the drafters of the 1993 amendments. Far more attorneys reported that initial disclosure decreased litigation expense, time from filing to disposition, the amount of discovery, and the number of discovery disputes than said it increased them. At the same time, many more attorneys said initial disclosure increased overall procedural fairness, the fairness of the case outcome, and the prospects of settlement than said it decreased them.

We found a statistically significant difference in the disposition time of cases with disclosure compared to cases without disclosure. Holding all variables constant, those with disclosure terminated more quickly. This finding corroborates attorneys' evaluations of the effects of initial disclosure on case duration.

C. Problems with Initial Disclosure

Although attorneys' assessment of initial disclosure was mostly positive, more than a third of the attorneys (37%) who participated in initial disclosure identified one or more problems with the process (and generally with other aspects of discovery in their case). The most frequently identified problem was too brief or incomplete disclosure (19% of attorneys who participated in disclosure). Relatively few attorneys reported that disclosure requirements led to motions to compel, motions for sanctions, or other satellite litigation. Problems in initial disclosure arose more frequently in cases involving large stakes and high expenses or that were characterized as complex or contentious.

7. *With What Frequency Is Expert Disclosure Used? What Are Its Effects? What Kinds of Problems Arise in Expert Disclosure?*

The 1993 revisions to Rule 26(a)(2) require attorneys, unless they stipulate otherwise, to provide opposing counsel with a list of expert witnesses and, when appropriate, a written report summarizing the testimony to be offered by expert witnesses.[22] Although it was likely that

---

[22] FED. R. CIV. P. 26(a)(2) provides:

(a) Required Disclosures; Methods to Discover Additional Matter.

(2) Disclosure of Expert Testimony.

(A) In addition to the disclosures required by paragraph (1), a party shall disclose to other parties the identity of any person who may be used at trial to present evidence under Rules 702, 703, or 705 of the Federal Rules of Evidence.

(B) Except as otherwise stipulated or directed by the court, this disclosure shall, with respect to a witness who is retained or specially employed to provide expert testimony in the case or whose duties as an employee of the party regularly involve giving expert testimony, be accompanied by a written report prepared and signed by the witness. The report shall contain a complete statement of all opinions to be expressed and the basis and reasons therefor; the data or other information con-

preparation of a written report might increase litigation costs, the rule drafters hoped it would enhance the amount of information available to each side and thus the fairness of the litigation.

A. Frequency of Expert Disclosure

We found that most attorneys (73%) in our sample did not engage in expert disclosure. Of those who did, 71% said they provided an expert's written report to the opposing party.

B. Effects of Expert Disclosure

Like initial disclosure, expert disclosure appears to be having its intended effect, albeit with an increase in litigation expenses for 27% of the attorneys who used expert disclosure. That an expanded report may increase litigation expenses is not completely unexpected. Indeed, what may be more surprising is that slightly more attorneys (31%) reported decreased litigation expenses.

Of the respondents who perceived an effect, far more said expert disclosure increased both overall procedural fairness and the fairness of the case outcome than said it decreased them. Many more also said expert disclosure increased pressure to settle than said it decreased such pressure.

C. Problems with Expert Disclosure

Of respondents in cases where expert disclosure took place, 27% reported problems with expert disclosure. The most frequent problems cited by attorneys were that expert disclosure was too brief or incomplete (13%), too expensive (9%), or not updated (9%).

---

sidered by the witness in forming the opinions; any exhibits to be used as a summary of or support for the opinions; the qualifications of the witness, including a list of all publications authored by the witness within the preceding ten years; the compensation to be paid for the study and testimony; and a listing of any other cases in which the witness has testified as an expert at trial or by deposition within the preceding four years.

(C) These disclosures shall be made at the times and in the sequence directed by the court. In the absence of other directions from the court or stipulation by the parties, the disclosures shall be made at least 90 days before the trial date or the date the case is to be ready for trial or, if the evidence is intended solely to contradict or rebut evidence on the same subject matter identified by another party under paragraph (2)(B), within 30 days after the disclosure made by the other party. The parties shall supplement these disclosures when required under subdivision (e)(1).

FED. R. CIV. P. 26(a)(2).

8. *With What Frequency Are the Other 1993 Discovery Rule Amendments Used (Meet-and-Confer Requirements, Discovery Planning, Limits on Deposition Conduct, and Limits on Interrogatories and Depositions)? What Are Their Effects?*

The 1993 rule revisions also brought several other changes. We discuss three: the requirement to meet and confer; the requirement to plan discovery; and the limits on the number of depositions and deposition conduct.

A. Meet-and-Confer/Discovery Planning

Amended Rule 26(f)[23] requires parties to meet and confer to develop a proposed discovery plan prior to the court's scheduling conference, and amended Rule 16(b) in turn directs courts to "enter a scheduling order that limits the time . . . to complete discovery."[24]

In our study, about 60% of the attorneys reported that they met and conferred with opposing counsel. Whether they had conferred with opposing counsel or not, just over 70% of attorneys reported that a discovery plan—sometimes as part of a scheduling order—was developed for their case. As was the case with the disclosure provisions, the

---

[23] FED. R. CIV. P. 26(f) provides:

> **(f) Meeting of Parties; Planning for Discovery.** Except in actions exempted by local rule or when otherwise ordered, the parties shall, as soon as practicable and in any event at least 14 days before a scheduling conference is held or a scheduling order is due under Rule 16(b), meet to discuss the nature and basis of their claims and defenses and the possibilities for a prompt settlement or resolution of the case, to make or arrange for the disclosures required by subdivision (a)(1), and to develop a proposed discovery plan. The plan shall indicate the parties' views and proposals concerning:
>
> **(1)** what changes should be made in the timing, form, or requirement for disclosures under subdivision (a) or local rule, including a statement as to when disclosures under subdivision (a)(1) were made or will be made;
>
> **(2)** the subjects on which discovery may be needed, when discovery should be completed, and whether discovery should be conducted in phases or be limited to or focused upon particular issues;
>
> **(3)** what changes should be made in the limitations on discovery imposed under these rules or by local rule, and what other limitations should be imposed; and
>
> **(4)** any other orders that should be entered by the court under subdivision (c) or Rule 16(b) and (c).
>
> The attorneys of record and all unrepresented parties that have appeared in the case are jointly responsible for arranging and being present or represented at the meeting, for attempting in good faith to agree on the proposed discovery plan, and for submitting to the court within 10 days after the meeting a written report outlining the plan.

FED. R. CIV. P. 26(f).

[24] FED. R. CIV. P. 16(b).

majority of those who reported effects said the effects were of the type intended by the rule drafters. That is, the process of meeting and conferring reduced overall litigation expenses, time from filing to disposition, and the number of issues in the case and increased overall procedural fairness and fairness of the case outcome.

B. Numerical Limits on Depositions

The 1993 amendments revised Rule 30(a)(2)(A) to limit to ten the number of depositions that may be taken without court approval.[25] For our sample of cases, 75% of attorneys who reported that depositions were used in their case said seven or fewer individuals were deposed, well within Rule 30's presumptive limit of ten depositions. Only 4% of attorneys reported that too many depositions were conducted in their case.

About 25% of the 67% of attorneys who said they had used depositions in the sample case reported problems with this discovery tool. The most frequent complaint (12% of those who used depositions) was that too much time was spent on a deposition. The median length of the longest deposition was four hours; 25% of the longest depositions took seven hours or more.

In 1991, the Committee considered but did not adopt a six-hour time limit on depositions.[26] Had this limit been in effect, it appears it

---

[25] FED. R. CIV. P. 30(a)(2)(A) provides:

> **Rule 30. Depositions Upon Oral Examination**
>
> **(a) When Depositions May Be Taken; When Leave Required.**
>
> **(1)** A Party may take the testimony of any person, including a party, by deposition upon oral examination without leave of court except as provided in paragraph (2). The attendance of witnesses may be compelled by subpoena as provided in Rule 45.
>
> **(2)** A party must obtain leave of court, which shall be granted to the extent consistent with the principles stated in Rule 26(b)(2), if the person to be examined is confined in prison or if, without the written stipulation of the parties
>
> **(A)** a proposed deposition would result in more than ten depositions being taken under this rule or Rule 31 by the plaintiffs, or by the defendants, or by third-party defendants;
>
> * * *

FED. R. CIV. P. 30(a)(2)(A).

[26] *See* Proposed Amendment to Rule 30(d), *in* Preliminary Draft of Proposed Amendments to the Federal Rules of Civil Procedure, 137 F.R.D. 53, 111–12 (1991). The Amendment states:

> Unless otherwise authorized by the court or agreed to by the parties, actual examination of the deponent on the record shall be limited to six hours. Additional time shall be allowed by the court if needed for a fair examination of the deponent and consistent with the principles stated in Rule 26(b)(2), or if the deponent or another party has impeded or delayed the examination. If the court finds such an impediment, delay, or other conduct that frustrates the fair examination of the deponent,

would have affected about 30% of the cases in our sample. In a separate analysis of local rules imposing time limits on depositions or authorizing judges to impose such limits when needed, we were unable to find reliable evidence that such limits had achieved their intended effects.[27]

C. Deposition Conduct

In 1993, the Rules Committee also amended Rules 30(d)(1) and (3) to proscribe using objections in an argumentative or suggestive manner, to bar attorneys from instructing witnesses not to answer questions, and to provide consequences for other unreasonable conduct.[28] In this study, a small number of attorneys reported problems in three areas of deposition conduct: an attorney coached a witness (10%), instructed a witness not to answer (8%), or otherwise acted unreasonably (9%). Though their incidence is small, these responses suggest that the 1993 amendments have not entirely eliminated these problems.

---

it may impose upon the person responsible therefor an appropriate sanction, including the reasonable costs and attorney[s]' fees incurred by any parties as a result thereof.

Id.

[27] *See* MARIE CORDISCO LEARY & THOMAS E. WILLGING, FEDERAL JUDICIAL CTR., NUMERICAL AND DURATIONAL LIMITS ON DISCOVERY EVENTS AS ADOPTED IN FEDERAL LOCAL RULES AND STATE PRACTICES 10–11 (1998) (on file with the authors).

[28] FED. R. CIV. P. 30(d)(1) and (3) provide:

Rule 30. Depositions Upon Oral Examination

(d) Schedule and Duration; Motion to Terminate or Limit Examination.

(1) Any objection to evidence during a deposition shall be stated concisely and in a non-argumentative and non-suggestive manner. A party may instruct a deponent not to answer only when necessary to preserve a privilege, to enforce a limitation on evidence directed by the court, or to present a motion under paragraph (3).

* * *

(3) At any time during a deposition, on motion of a party or of the deponent and upon a showing that the examination is being conducted in bad faith or in such manner as unreasonably to annoy, embarrass, or oppress the deponent or party, the court in which the action is pending or the court in the district where the deposition is being taken may order the officer conducting the examination to cease forthwith from taking the deposition, or may limit the scope and manner of the taking of the deposition as provided in Rule 26(c). If the order made terminates the examination, it shall be resumed thereafter only upon the order of the court in which the action is pending. Upon demand of the objecting party or deponent, the taking of the deposition shall be suspended for the time necessary to make a motion for an order. The provisions of Rule 37(a)(4) apply to the award of expenses incurred in relation to the motion.

FED. R. CIV. P. 30(d)(1), (3).

9. *With What Frequency Does Document Production Occur? What Kinds of Problems Arise in Document Production?*

Anecdote has suggested that document production is one of the most costly parts of discovery and is fraught with difficulties. As we will discuss shortly, it is not one of the most expensive forms of discovery—at least in terms of attorney costs. It is, however, the discovery device most frequently used by attorneys (84%) and the activity for which the highest percentage of attorneys reported problems in their case (44%).

The most frequently reported problems with document production were failure to respond adequately (28% of those who engaged in document production) and failure to respond in a timely fashion (24%). Those representing plaintiffs were more likely to complain that a party failed to respond adequately, while those representing defendants were more likely to complain that requests were vague or sought an excessive number of documents. Problems with document production are more likely to occur in high stakes, complex, or contentious cases, but a significant number of problems also occur in noncomplex, non-contentious, and low-stakes cases.

10. *What Are the Expenses for Specific Discovery Activities, and How Do Those Activities Relate to Total Litigation Costs and Case Duration?*

Depositions accounted for by far the greatest amount of discovery expense that flows through the attorney (median=$3500 in cases with depositions). The next most costly types of discovery were expert disclosure and discovery (median=$1375), document production (median=$1100), and interrogatories (median=$1000). Less expense was incurred by initial disclosure (median=$750) and meeting and conferring/discovery planning (median=$600).

Document production, often said to be the most burdensome and costly part of discovery, typically involved rather modest costs, at least in regard to costs that flow through the attorney.

We examined the relationship between the above discovery activities and litigation cost and time, and we found that total hours spent in depositions is strongly correlated with the total cost of litigation. We also found that as the *percentage* of total costs attributable to document production increases, total litigation costs also increase.

Looking at the relationship between discovery activities and the duration of the litigation, we found that as the percentage of total costs attributable to depositions increased so did case duration. On the other hand, when initial disclosure was used, case duration was shorter.

11. *What Attorney-Related Factors Are Associated with Discovery Problems, Litigation Costs, and Case Duration? To What Extent Are Discovery Problems Due to Judicial Case Management?*

Among four types of attorney/client conduct that might have contributed to discovery problems, attorneys were most likely to attribute problems to one or more attorneys' or parties' intentional delays and complications; 55% of the attorneys cited this as a cause of discovery problems. Smaller percentages attributed problems to lack of client cooperation, pursuit of disproportionate discovery, or incompetent or inexperienced counsel.

Two factors related to the structure of law practice were associated with increased costs or disposition times. For attorneys from law firms with more than eleven attorneys, costs were significantly higher than costs reported by attorneys from smaller firms. This relationship exists independently of factors like complexity, contentiousness, or the amount at stake in the litigation. Attorneys' method of billing also was important, with hourly billing (as opposed to a contingent fee or some other method) associated with increased times from filing to disposition.

When judges were involved in discovery, as they were for 81% of the attorneys in our sample, they were far more likely to have been involved in the planning phase of discovery than to have decided motions or imposed sanctions. The vast majority of attorneys (83%) found no problems with the court's management of disclosure or discovery. Although no single area had a high level of reported problems, the most frequent specific complaints were that the time allowed for discovery was too short (7%) and that the court was too rigid about deadlines (5%).

12. *Is Nonuniformity in the Disclosure Rules a Problem?*

Although for some time concern has been growing about nonuniformity in the Rules, those concerns became greater after 1993 when the revisions to Rule 26 explicitly permitted districts to opt out of the Rule's initial disclosure requirements.[29] Since that time, an increasing number of voices among both the bench and bar have asserted that nonuniformity in the discovery rules—and in the disclosure rules in particular—is a serious problem and should be resolved.

---

[29] *See* FED. R. CIV. P. 26(a)(1) ("Except to the extent otherwise stipulated or directed by order or local rule, a party shall . . . provide to other parties . . . .").

The attorneys in our study shared that opinion, at least with regard to nonuniformity of disclosure *across* districts. A clear majority (60%) of the attorneys with opinions on this subject said nonuniformity in the disclosure rules creates serious or moderate problems. Most said the problems are moderate, but attorneys who practiced in four or more districts (10% of the respondents) were more likely than other attorneys to see such problems as serious. Even these national practitioners, however, were more likely to label the problems moderate than serious.

Far fewer attorneys expressed concern about nonuniformity of disclosure requirements *within* districts; about 25% of the attorneys thought that serious or moderate problems exist with nonuniformity of disclosure rules within the district in which the sample case was filed. Almost half said no significant lack of uniformity exists within the district in which their case was filed.

13. *What Changes Would Be Most Likely to Reduce Discovery Expenses? If Change Is Necessary, What Direction Should It Take? Should Change Occur Now or Later?*

Both judges and lawyers, as well as policymakers within and outside each group, have asked what should be done about problems in discovery, the costs of discovery, and the impact of nonuniformity. Are additional rule changes needed, for example? Or should judges and attorneys modify their behavior in some way? We examined the question of change in several ways.

A. What Kind of Reform Holds the Greatest Promise for Reducing Discovery Problems?

In response to a list of thirteen changes that might reduce litigation costs, the most frequent choice by the attorneys was to increase the availability of judges to resolve discovery disputes (54%). Adopting a uniform rule requiring initial disclosure ranked second (44%), followed by two changes that tied for third place: imposing sanctions more frequently and severely (42%) and adopting a civility code (42%).

When we combined these thirteen response options into a more limited set, judicial case management ranked first (63%), followed closely by changing attorney behavior through sanctions or civility codes (62%).

The attorneys were then asked which of three approaches—more judicial case management, further rule revisions, or attention to attorneys' and clients' economic incentives—holds the most promise for re-

ducing problems in discovery. About half the attorneys said increased judicial case management holds the most promise. Only about a quarter called for revising the rules to further control or regulate discovery, while the other quarter called for addressing the need for changes in client/attorney incentives.

B. Do the Discovery Rules Need To Be Changed? In What Way Should They Be Changed?

Although attorneys view judicial case management as the most promising approach to reducing discovery problems, 83% nonetheless want changes in the discovery rules. The desire for change centers on initial disclosure. A plurality of all respondents in the sample (41%) favored a uniform national rule requiring initial disclosure in every district. The opposite solution—a national rule with no requirement of initial disclosure and with a prohibition on local requirements for initial disclosure—was favored by 27% of the attorneys. Close to a third (30%) favored the status quo. Attorneys who participated in initial disclosure in the sample case were considerably more likely to favor requiring disclosure than attorneys who did not.

C. When Should Changes Be Made?

Among those who think the discovery rules should be revised, a majority (68%) favor making changes now. Most of that group consists of attorneys who want immediate consideration of change to Rule 26(a)(1).

IV. Detailed Results and Analysis[30]

1. *What Kinds of Discovery Do Attorneys Use?*

A. Frequency of Discovery Activities

Overall, about 85% of the attorneys in this national sample reported that some type of formal discovery activity—ranging from meeting and conferring to depositions and document production—occur-

---

[30] Results are based on each attorney's responses about the case included in the sample. Plaintiff and defendant attorneys' responses from the same case have not been matched for these analyses. Using only those cases in which at least one plaintiff's and one defendant's attorney responded would diminish the number of useful responses to about 300 cases.

In some tables, columns of numbers will add to more than 100% due to rounding. In other tables, numbers may add to more than 100% because respondents could choose more than one response.

Unless otherwise noted, we report only those differences that are statistically significant

Table 1

Percentage of attorneys reporting that various general types of discovery and disclosure occurred, in cases involving some discovery or disclosure

Discovery activity	%* (N=886)
Meeting and conferring re discovery plan	72
Entry of discovery plan or scheduling order	72
Informal exchange of discoverable information	62
Initial disclosure (Rule 26(a)(1) or local provision)	58
Either expert disclosure or expert discovery	36
Expert disclosure (Rule 26(a)(2) or local provision)	29
Formal discovery—Total (Interrogatories, Depositions, Documents, Requests for Admissions, Physical and Mental Examinations, Subpoenas, Inspections)	94

*Note that respondents could select more than one response. The percentages are based on the total number of responses in the subset of cases involving some discovery or disclosure and are not expected to equal 100%.

red in their case.[31] For many of the 15% with no discovery, the case terminated relatively early: 50% in 180 days and 75% within a year of filing.

Table 1 shows the percentage of attorneys reporting each type of discovery activity when there was any discovery or disclosure in the case. The vast majority (94%) said some form of formal discovery—depositions, interrogatories and so forth—had been conducted. Nearly three-quarters (72%) said a discovery plan or scheduling order had been entered in their case.

Table 2 presents a finer breakdown of the specific forms of discovery and disclosure reported by respondents. Document production is the most frequent form of discovery, reported by 84% of attorneys who used some discovery or disclosure in their case, followed closely by interrogatories (81%). The next most common forms of discovery are depositions (67%) and initial disclosure (58%).[32] Other forms of dis-

at the 0.05 level or smaller (i.e., the probability that the difference occurred by chance is at most 5%).

[31] Recall that the sample was drawn from cases likely to have some discovery (see Appendix). Thus, the incidence of discovery in this study is very likely higher than in studies that sample from all civil cases.

[32] Note that initial disclosure is a relatively recent addition to the discovery rules, with an effective date of December 1, 1993, though a few districts adopted a form of initial disclosure as part of their Civil Justice Reform Act Plans before the effective date of the federal rule. The sample includes cases to which the disclosure rules would not apply because the cases were filed

Table 2

Percentage of attorneys reporting that specific forms of discovery and disclosure occurred, in cases involving some discovery or disclosure

Discovery activity	%* (N=886)
Document Production	84
Interrogatories	81
Depositions	67
Initial disclosure (Rule 26(a)(1) or local provision)	58
Requests for Admission	31
Expert disclosure (Rule 26(a)(2) or local provision)	29
Expert Discovery	20
Physical or Mental Exam	13
Other Formal discovery (Subpoenas, Inspections)	9

*Note that respondents could select more than one response. The percentages are based on the total number of responses in the subset of cases involving some discovery or disclosure and are not expected to equal 100%.

covery, including expert discovery, occur in fewer than a third of the cases.

Given that about half of the courts in the sample had opted out of the district-wide application of initial disclosure, we were somewhat surprised to find 58% of attorneys reporting initial disclosure activity. As we will show below, a sizable portion of disclosure activity appears to result from use of initial disclosure by individual judges in districts that have formally opted out of the rule.

In subsequent sections of this Article, we will explore many of these forms of discovery in greater detail. We will not, however, give further attention to requests for admission or physical and mental examinations. Before leaving these discovery methods altogether, however, let us make two points revealed by our data. First, requests for admission were more likely to be reported by attorneys in very contentious cases (54% of these attorneys) than by attorneys in cases rated as somewhat or not at all contentious (36%). Similarly, more attorneys in complex cases (40% of these attorneys) reported using requests for admission than did attorneys in cases that were somewhat complex

before the effective date of the rule change or because they terminated prior to the time for filing disclosures (at or within ten days after the Rule 26(f) discovery planning meeting). Hence, the 58% of respondents reporting disclosure activity very likely understates the incidence of cases in which disclosure is now required.

(33%) or not at all complex (24%). Reported use of requests for admission was also more frequent when the stakes were greater than $150,000 (37% of these attorneys) than in lower stakes cases (25%).

Second, physical and mental examinations were most likely to be reported by attorneys in tort cases (26% of these attorneys), but a sizable number of attorneys in civil rights cases (9%) also reported that a medical examination was conducted. Not surprisingly, few attorneys in contracts cases (1%) and in a miscellaneous category of "other" civil cases[33] (3%) reported that medical examinations occurred in their case.

B. Informal Exchange

Although the findings discussed above are useful for understanding the extent to which attorneys use formal discovery, they also reveal that attorneys frequently engage in informal exchange of information. Table 1 shows that 62% of attorneys informally exchanged discovery information in cases where there was also some discovery or disclosure. In the cases in which attorneys reported no discovery or disclosure, 46% exchanged information informally.

Not surprisingly, informal exchanges were significantly more likely to occur in cases where relationships between the opposing sides were not contentious (64% of these attorneys informally exchanged information) than in very contentious cases (46%) or somewhat contentious cases (53%). What is surprising, though, is that informal exchanges occurred in about half of the contentious cases, suggesting this may be a well-established practice or that it is perhaps encouraged by some judges. Also, experienced attorneys were more likely than attorneys with less experience to report making informal exchanges; the rates increased from 50% of those with the least experience to 63% of those with the most experience. Such exchanges were more likely to be reported in tort cases (69%) than in contract (54%), civil rights (54%), or "other" cases (52%).

Attorneys who reported engaging in informal exchanges were less likely to report problems with discovery (38% reported problems) than were attorneys who did not engage in informal exchanges (58%). Similarly, attorneys who exchanged information informally were less likely to report problems with court management of discovery (15%) than were attorneys who did not exchange information informally (23%).

---

[33] "Other" cases are mostly federal statutory actions and labor cases. In the rest of the Article, we will refer to these cases by the term "other."

Though intriguing, these data do not tell us anything about cause and effect, only that there are differences between those attorneys who engage in informal exchange and those who do not. The question remains whether attorneys are more likely, for example, to exchange information because they are not having problems with discovery or are less likely to have problems because they have informally exchanged information. Or there could be a causal relationship among these factors and an as yet unknown factor. We cannot tell, but the data suggest there may be a constellation of behaviors (and conditions, such as greater experience) that make for smoother discovery.

2. *How Much Does Discovery Cost the Parties? What Are Its Costs Relative to Total Litigation Costs, to the Amount at Stake, and to the Information Needs of the Case? What Factors Are Related to the Total Cost of Litigation?*

A. Discovery Expenses in General and Relative to Total Litigation Costs

To understand the impact of discovery costs, it is important to examine them in the context of overall litigation costs. We asked attorneys to estimate their total litigation expenses, including attorney fees, paralegal fees, and fees for such items as expert witnesses, transcripts, and litigation support services. For our sample of attorneys, the median total litigation costs per client were about $13,000 for cases involving any discovery expenses (Table 3).[34] Note that these are litigation costs that flow through the attorney and do not include costs incurred separately by the client.[35]

---

[34] In Table 3, we report the 95th percentile, median, and 10th percentile for expenses and other monetary information to provide a reasonably thorough picture of the range of the results. The 95th percentile is the point on the distribution of responses that marks the divide between the top 5% of responses and the lower 95% of responses. In Table 3, in other words, 5% of respondents reported total expenses of more than $170,000 and 95% of respondents reported total expenses of $170,000 or less. Similarly, the 10th percentile marks the divide between the bottom 10% of responses and the upper 90% of responses. Thus, in Table 3, 10% of the respondents reported litigation expenses of $2300 or less and 90% reported expenses of more than $2300. The median—or midpoint—is, of course, the 50th percentile.

We do not report the mean litigation expense because it is inflated by extreme values above the 95th percentile and so does not reflect anything close to what is normal or typical. This same observation applies to the means for all discovery and litigation expenses expressed in monetary terms in this study.

[35] As with other data in this Article, all figures pertaining to litigation expenses are reported on an attorney/client basis, not on a per case basis. Note also that we asked respondents to provide a dollar estimate for actual litigation expenses. We then asked for an estimate of the percentage of those expenses that were allocated to discovery and to particular types of discovery.

Table 3

Total reported litigation expenses per client for cases involving any discovery expenses

	All respondents	Plaintiffs	Defendants
95th percentile	$170,000	$200,000	$150,000
Median	$13,000	$10,000	$15,000
10th percentile	$2,300	$2,000	$3,000
Number of respondents	899	415	484

Table 4

Percentage of clients' total litigation expenses accounted for by discovery and disclosure, among cases with some discovery expense

	All respondents	Plaintiffs	Defendants
95th percentile	90	90	90
Median	50	50	50
10th percentile	10	10	10
Mean	47	47	47
Number of respondents	941	430	511

Among attorneys reporting any discovery expenses, the proportion of litigation expenses attributable to discovery is typically fairly close to 50%, as shown in Table 4. Half estimated that discovery accounted for 25% to 70% of litigation expenses. Both the mean and the median were about 50%, and there is no apparent difference between plaintiffs and defendants in this regard.

These data suggest that the typical case has rather modest litigation expenses and that discovery expenses are a sizable but not surprising proportion of these expenses.

B. Discovery Expenses Relative to Stakes

For purposes of understanding discovery and its contribution to litigation expenses, it is also important to examine discovery expenses relative to the stakes of the case. We estimated the monetary amount

We applied these percentage estimates to the total dollar estimate to generate dollar estimates for discovery expenses.

Table 5

Estimated amount at stake per client

	All respondents	Plaintiffs	Defendants
95th percentile	$5,000,000	$3,000,000	$5,500,000
Median	$150,000	$125,000	$200,000
10th percentile	$4,000	$2,100	$10,000
Number of respondents	1028	460	568

Table 6

Discovery expenses as a percentage of amount at stake

	All respondents	Plaintiffs	Defendants
95th percentile	32	32	32
Median	3	3	3
10th percentile	0.3	0.3	0.3
Number of respondents	801	361	440

at stake in the case as the difference between the best and worst "likely outcomes" in the case, based on attorneys' reports of the expected outcomes. For this sample of cases, the median estimated monetary stakes per client were $150,000, with defendants estimating somewhat higher stakes than plaintiffs (Table 5).[36] Relative to these stakes, discovery expenses were very low—typically only 3% of the estimated stakes (Table 6). The proportion of discovery expenses relative to stakes was identical for plaintiffs and defendants.

Discovery expenses typically amounted to about 3% of the monetary stakes whether the stakes were large or small. That is, the percentage spent on discovery remained constant at each level of stakes.[37] The

[36] We measured the monetary amount at stake in the case as the difference between the best and worst "likely outcomes" reported by the attorneys. For example, if a plaintiff's attorney reported that the best likely outcome in a case was a $500,000 recovery and that the worst likely outcome was a $250,000 recovery, we calculated the stakes to be $250,000. Likewise, if a defendant's attorney reported the best likely recovery to be a $100,000 loss and the worst likely recovery to be a $500,000 loss, we calculated the stakes to be $400,000. We do not report the mean in Table 5 for the reasons cited in *supra* note 34.

[37] The Pearson correlation coefficient between the ratio of discovery expenses to stakes and the log of stakes is 0.10. The log is used because the Pearson coefficient assumes a linear relationship, and the log of stakes appears linearly related to discovery expenses as a percentage of stakes, while the absolute stakes are not linearly related to discovery expenses as a percentage of stakes.

Table 7

Percentage of attorneys reporting the extent to which their client was concerned about nonmonetary relief or consequences beyond the monetary relief sought in the case

Importance of nonmonetary consequences	All respondents	Plaintiffs	Defendants
Such consequences were of dominant concern*	23	24	21
Such consequences were of some concern*	32	24	38
Such consequences were of little or no concern*	46	52	41
Number of respondents	1022	457	565

*The differences between plaintiffs' and defendants' responses are statistically significant.

absolute dollars spent on discovery, however, rose as the stakes increased.

While monetary stakes are often critically important to a party, they may not be the only measure of a case's significance. The case may, for example, involve a request for equitable relief not susceptible to monetary valuation, or a party may be concerned about the case's impact on future claims. Almost 25% of the attorneys reported that such nonmonetary issues were of dominant concern in their case (Table 7). Attorneys in civil rights cases (70%) and in "other" cases (64%) were especially likely to report that their clients had such concerns (compared to 43% of attorneys in contract cases and 34% in tort cases).

Unlike the relationship we found between discovery expenses and the amount at stake (i.e., as one rises the other does), we found no relationship between discovery expenses and nonmonetary stakes. That is, attorneys who reported that nonmonetary issues were of dominant concern to their clients were no more likely than other attorneys to have spent large sums of money on discovery. One possible explanation is that nonmonetary relief often arises in the context of a motion for a preliminary injunction. The truncated discovery schedule in such proceedings may serve to constrain discovery expenses.

We also examined the attorneys' subjective appraisals of the value of discovery in relation to stakes and found that 15% of attorneys thought discovery expenses were high relative to the stakes in their case and 20% thought them to be low relative to stakes (Table 8), while about half of the attorneys thought discovery expenses were proportionate to the stakes.[38]

[38] The mean percentage of discovery expenses unnecessarily incurred was about 15% for

Table 8

Percentage of attorneys reporting whether discovery expenses, in relation to stakes, were high, low or about right

	All Respondents	Plaintiffs*	Defendants*
High	15	17	14
About right	54	51	56
Low	20	20	20
No Opinion	11	12	10
Number of respondents	1089	497	592

*The distribution of differences among plaintiffs and defendants is statistically significant.

Although few could argue with the general proposition that discovery costs should be kept low, an important question is whether sufficient information is obtained when discovery costs are low, especially when they are low relative to stakes. Some attorneys who had low costs relative to stakes, for example, may have found their information needs compromised. We found, to the contrary, that when attorneys reported that costs were low relative to stakes, by far the greatest proportion (88%) also reported that the information they obtained was about the right amount needed for a fair resolution of the case.[39] A mismatch between cost and usefulness of the discovered information was, in fact, more likely to occur when discovery costs were reported to be high relative to the stakes; 44% of attorneys who said costs were high relative to the stakes said the information obtained was more than the amount necessary for a fair resolution of the case.

C. Discovery Relative to Information Needs

In general, most attorneys, including both plaintiffs' and defendants' attorneys, thought the discovery or disclosure generated was about the right amount needed for a fair resolution of the case (Table 9). Fewer than 10% thought the process generated too little information, and about 10% thought the process generated too much information. Plaintiffs' attorneys were considerably more likely than defendants' attorneys to report that discovery yielded too little information.

those who said the cost of discovery relative to stakes was low or about right (compared to about 30% for respondents reporting that discovery costs were high relative to the stakes).

[39] Note that the analysis in this paragraph was done after removing the "No opinion" responses.

Table 9

Percentage of attorneys rating the amount of useful information discovered in relation to the informational needs of the case

Amount of discovered information	All respondents	Plaintiffs*	Defendants*
Too much information	9	6	11
About the right amount of information needed for a fair resolution	69	68	71
Too little information	8	12	5
No opinion	14	14	14
Number of respondents	1094	499	595

*The differences between plaintiffs' and defendants' responses are statistically significant.

D. Factors Related to Total Litigation Costs

To understand more fully the nature of the costs in litigation, we undertook statistical analyses[40] to identify the factors that are related to litigation costs. We found that total litigation costs were most strongly related to the size of the monetary stakes in the case.[41] Higher litigation costs were also associated with the *percentage* of litigation costs attributable to document production and the number of hours spent in depositions. In each instance, as one went up, so did the other. In addition, higher costs were associated with the size of the law firm. Attorneys from firms of more than eleven lawyers generally reported higher costs than attorneys from smaller firms, a relationship that exists independently of other variables such as case complexity or size of stakes. Further, copyright, patent, and trademark cases had higher costs than the typical case, while civil rights and contracts cases had lower costs. None of the other case types, such as tort or other federal statutory claims, had a statistically significant relationship to total liti-

[40] We used multiple regression analysis, a statistical method for identifying which of several potentially explanatory variables best explains the variability of a dependent variable, here the total cost of litigation. The method allows one to test the strength of the relationship of each explanatory variable to the dependent variable while accounting for the influence of the other variables. To some extent, the value of the explanatory model developed depends on the number and kind of variables included in the analysis. We included all variables measuring costs and case characteristics that were available from our questionnaire and from data routinely collected by the Administrative Office of the United States Courts. For further explanation and description of the variables examined see *infra* note 41 and see WILLGING ET AL., *supra* note 16, at 52–55.

[41] Other categories of factors examined included the total costs of discovery and disclosure, costs and amounts of various discovery activities, judicial case management practices, case characteristics, and attorney characteristics. *See* WILLGING ET AL., *supra* note 16, at 53–54.

gation costs. Finally, costs were higher in cases reported by the attorneys to be contentious or very complex.[42]

3. *How Often Do Problems Arise in Discovery? What Kinds of Problems Arise? Do Problems Arise in Particular Types of Cases?*

A. Frequency and Nature of Discovery Problems

Fifty-two percent (52%) of the attorneys in this sample reported that they had no problems with disclosure or discovery in their case.[43] Defendants' attorneys (58%) were more likely than plaintiffs' attorneys (42%) to report that they had no problems. Of the attorneys who reported problems, the majority—55%—reported one to three types of problems, 22% reported four to five types of problems, and 23% reported more than five types of problems.

Among the four types of discovery for which we examined the extent and nature of discovery problems, we found that document production generated the highest rate of problems (Table 10), with about half (44%) of the attorneys who had engaged in document production reporting one or more problems with the process. Thirty-seven percent (37%) of those who had engaged in initial disclosure encountered problems with this procedure, while depositions, which as we shall see consumed the most discovery dollars, caused the fewest problems.

Table 11 shows the frequency with which discovery problems of one sort occur in tandem with problems of another sort. When an attorney reported problems in one discovery activity, that attorney often reported problems in other discovery activities as well. Attorneys who identified problems with initial disclosure, for example, were also more likely to identify problems with document production—that is, 77% of those who said initial disclosure was a problem also said document production was a problem. These findings seem to suggest, as do those in the following section, that there may be problem cases rather than isolated problems with each separate form of discovery. These findings are consistent with a phenomenon we discussed earlier: that cases with larger amounts of discovery are more likely to have more discovery problems. Then, if cases with problems in disclosure, to take an example, include a disproportionate number of cases with large

---

[42] *See id.*

[43] Responses are to a list of 20 potential problems relating to initial disclosure, document production, oral depositions, and expert disclosure.

Table 10

Percentage of attorneys reporting problems with document production, initial disclosure, expert disclosure, or depositions, in cases in which the activity occurred

Discovery or disclosure procedure	%
Document production (N=743)	44
Initial disclosure (N=517)	37
Expert disclosure (N=259)	27
Depositions (N=592)	26

Table 11

Percentage of attorneys reporting problems with document production, initial disclosure, expert disclosure, or depositions, by their reports for each other type of problem*

	Initial disclosure	Expert disclosure	Depositions	Document production
Initial disclosure (N=190)		31	41	77
Expert disclosure (N=69)	68		51	81
Depositions (N=154)	53	31		88
Document Production (N=326)	53	25	42	
Problem rate for entire sample	37	27	26	44

*All of the differences in percentages of problems are statistically significant.

amounts of discovery, more of these disclosure-problem cases can be expected to have problems with other aspects of discovery.

B. Discovery Problems and Nature of Case

In what turns out to be a common pattern, the presence of discovery problems differed by the type of case, size of monetary stakes in the litigation, complexity of the case, and contentiousness of relationships among attorneys and parties. Attorneys in tort cases (50% of attorneys in these cases) and civil rights cases (50%) were notably more likely to report discovery problems than were attorneys in contracts cases (36%) and "other" cases (43%). Discovery problems were also much more likely to be reported in cases with higher stakes. As the stakes increased from $4000 or less to over $2 million, the percentage of attorneys who reported problems increased progressively—from 27% to 69%, respectively. Likewise, 61% of attorneys in very complex cases reported problems with discovery, compared to 50% of

attorneys in somewhat complex cases and 33% of attorneys in non-complex cases. On the contentiousness scale, 71% of attorneys in cases they rated as very contentious reported discovery problems, compared to 64% in somewhat contentious cases and 29% in non-contentious cases.

Not only the presence but also the number of different types of discovery problems differed by monetary stakes, complexity, and contentiousness. Attorneys in cases valued over $150,000 were more than twice as likely to report multiple types of problems with discovery than attorneys in lower-stakes cases—28% compared to 12%. Likewise, attorneys in very complex cases (39% of them) were more likely to report multiple types of problems than were attorneys in somewhat complex cases (21%) and in noncomplex cases (15%). Furthermore, attorneys in very contentious cases were more likely to report multiple types of problems (42%) than attorneys in somewhat contentious cases (22%) and in non-contentious cases (12%).

Again, the data suggest that problems in discovery may not differ so much by which form of discovery is used as they do by the nature of the case. Where a lot of money is at stake, where the issues involve personal injury or matters of principle, or where the relationships are contentious and the issues complex, more discovery and more problems with discovery exist.

Problems with discovery are not necessarily more serious, however, or more likely to occur as a consequence of case complexity, contentiousness, amount at stake, or amount of discovery expenses. It is true that such cases have more discovery problems and more expenses due to discovery problems than do other cases, but this may simply be due to their having greater amounts of discovery. A problem in conducting a deposition, for instance, may be as likely to occur if the deposition is in a small, noncomplex case as it is if that deposition occurs in a large, complex case. The large case, however, may offer more opportunities for deposition problems simply because there are more depositions.

In a further convergence of findings, we see that stakes, expenses, discovery expenses, and number of discovery problems are proportional—as one increases, the others do too. High stakes cases may have more problems simply because they offer more discovery activity and, hence, more opportunities for problems to arise.

4. *What Proportion of Discovery Expense Is Due to Discovery Problems?*

About 40% of attorneys reported that some discovery expenses were incurred unnecessarily because of problems in discovery. The

Table 12

Attorney estimates of the percentage of discovery expenses per client incurred unnecessarily because of problems in discovery

	All Respondents	Plaintiffs	Defendants
95th percentile	58	75	50
Median	13	15	10
15th percentile	2	2	2
Mean*	19	21	17
Number of respondents	366	168	198

* The differences between plaintiffs' and defendants' responses are statistically significant, but it is a matter of judgment whether, say, a five percentage point difference at the 10–15% range (looking at the median) represents a difference worthy of attention.

mean percentage of expenses due to discovery problems was 19% (Table 12).[44]

Though the absolute cost of unnecessary discovery is greater in cases with higher stakes and higher overall costs, we found little correlation between the percentage of litigation costs due to unnecessary discovery expenses and other variables that plausibly might be related to those expenses, such as overall discovery expense, overall litigation expense, and amount at stake in the case.[45] In other words, the expenses due to unnecessary discovery appear to be proportional to the size of the case, just as for discovery expenses generally.

The attorneys' estimates of expenses incurred unnecessarily because of discovery problems permit us to place a value on the financial significance of these problems. Using the percentage of attorneys who reported some problems with discovery (48%) and the mean percentage of discovery expenses attributed to such problems (19%) and applying those numbers to the entire sample, we estimate that about 9% (48% multiplied by 19%) of all discovery expenses are thought by attorneys to be incurred unnecessarily because of problems in discovery. Since discovery expenses account for about 47% of all litigation expenses, unnecessary discovery expenses thus represent about 4% (9% multiplied by 47%) of total litigation costs.

[44] In Table 12, we show the 15th rather than the 10th percentile because the 10th percentile is 0%.

[45] The Pearson correlation coefficients were 0.08 for discovery expenses, 0.12 for litigation expenses, and 0.09 for amount at stake.

5. *What Factors Are Related to Litigation Duration?*

Current concerns about civil litigation have focused not only on litigation costs, but also on the time to disposition.[46] Using survival analysis, a method that takes into account cases that have not yet terminated as well as those that have, we examined which variables might be related to disposition time.[47] The results are as interesting for what we did not find as for what we found.

We found that, as with costs, the stakes in the litigation were directly related to the length of the case: the higher the stakes, the longer the time to disposition. One other measure of cost—the *percentage* of costs attributable to depositions—also varied with case duration, with disposition time increasing as the percentage of cost spent on depositions increased. We did not, however, find any impact of document production costs on disposition time, though we had found such a relationship when examining variables related to litigation costs.

Notably, we found that disposition time was shorter in cases in which the attorneys reported that initial disclosure had taken place pursuant to a local rule, national rule, or a judge's order.[48] Shorter disposition times were also found where attorneys reported they generally represent both plaintiffs and defendants equally and where the case was a contract, personal property, or civil rights case. We found as well that disposition time was related to the attorney's billing method: cases in which the attorney reported billing on an hourly basis took longer than other cases. Not surprisingly, cases that were complex also had longer disposition times.

---

[46] For example, the Civil Justice Reform Act of 1990, 28 U.S.C. §§ 471–482, focused on problems of cost and disposition time and required each district court to put into place a "civil justice expense and delay reduction plan." 28 U.S.C. § 471 (1994).

[47] We measured disposition time as the time from case filing to termination, as recorded in the Administrative Office statistical records. As in the multiple regression analysis described above, *see supra* note 40, we examined the relationship of disposition time to such variables as the total costs of discovery and disclosure, costs and amounts of various discovery activities, judicial case management practices, case characteristics, and attorney characteristics.

The statistical technique used was survival analysis, a method drawn from engineering and biostatistics and now routinely applied to social science issues. Survival analysis studies the impact of explanatory variables on the elapsed time from one event to another—here from case filing to disposition—and takes into account the fact that a case may not yet have terminated. For further explanation and description of the variables examined, see WILLGING ET AL., *supra* note 16, at 53, 54–55.

[48] This finding differs from RAND's findings on initial disclosure. *See* RAND REPORT, *supra* note 13, § III(C)(2) ("early disclosure requirements are not associated with significantly reduced time to disposition"). As Kakalik et al. note in the RAND REPORT, however, "[b]ecause our sample cases were selected well before the revised Rule 26(a)(1) went into effect, we could not use our data to evaluate that revised rule." *Id.* § I(F)(2).

We did not find, however, any relationship between disposition time and the length of time the judge permitted for discovery ("discovery cutoff").[49] This important finding suggests that discovery cutoffs may not be linked to early, firm trial dates or other disposition activity. It also suggests that altering the rules regarding the length of discovery may not reduce litigation time.

The above conclusion differs from RAND's finding as presented to the Advisory Committee in September and reported elsewhere in this volume[50] and in RAND's Civil Justice Reform Act report.[51] We offer two possible reasons for the discrepancy. First, the populations studied are quite different. RAND studied a random sample of cases from ten pilot districts and ten comparison districts, which were selected by the Judicial Conference from the ninety-four federal districts. We examined a random sample of closed cases in eighty-six of ninety-four districts. Those districts account for 97% of federal civil cases.[52]

Second, the research methods are different. To measure discovery cutoff time, RAND used a district-wide median. We used case-specific information—that is, each attorney's report of the amount of time permitted for discovery in the case under study. While attorneys' after-the-fact recollections suggest some degree of caution, studying discovery cutoffs on a case-by-case basis yields a more precise measure of

---

[49] *See* WILLGING ET AL., *supra* note 16, at 53–55 (multivariate analyses). The measure used was an attorney's report that a discovery cutoff was imposed in the case and the length of the cutoff imposed.

We also examined the bivariate (two variable) relationship between duration of the litigation and attorneys' case-specific reports of time limits on discovery imposed by the court. We found very little relationship between discovery cutoffs and case duration ($r=.16$; $p=.001$). Similarly, using multivariate analyses, we found no strong or statistically significant relationship between the duration of the litigation and any of the forms of case management studied (such as limits on the length of time or amount of discovery, issuance of a discovery plan, or court conferences to address discovery issues). Initial disclosure was the only procedural device we found that was related to the length of the litigation. *See id.*

[50] *See* RAND REPORT, *supra* note 13, § III(F)(2) (finding that "the district's median days to discovery cutoff is a statistically significant predictor of time to disposition; shorter cutoff predicts shorter time to disposition" and estimating that a 60-day reduction in median discovery cutoff would correspond to a 55-day reduction in time to disposition).

[51] *See* JAMES S. KAKALIK ET AL., RAND INST. FOR CIVIL JUSTICE, AN EVALUATION OF JUDICIAL CASE MANAGEMENT UNDER THE CIVIL JUSTICE REFORM ACT 62–63 (1996) (estimating "a 1.5-month reduction in the median time to disposition for cases that survive at least nine months if the district median discovery cutoff is reduced from 180 days to 120 days").

[52] RAND also limited its analysis to cases in which issue had been joined and the disposition was 270 days or greater. *See* RAND REPORT, *supra* note 13, § III tbl. 3.4. Limiting the analysis to this subset of cases does not, however, account for the difference in our findings. When we examined only cases with issue joined and disposition times over 270 days (62% of the cases with discovery cutoffs in our sample), we again found little relationship between discovery cutoffs and time to disposition ($r=0.14$, $p=0.02$).

discovery time than does a district-wide median. Moreover, analysis on a district-wide basis may be misleading because districts with an established practice of expediting litigation may have chosen shorter cutoffs precisely because they fit the local practice. Either of these differences—or other reasons not addressed here—might account for the different outcomes. Clearly, further research, including an independent analysis of the data from the two studies, would be welcome.

6. *With What Frequency Is Initial Disclosure Used? What Are Its Effects? What Kinds of Problems Arise in Initial Disclosure?*

A. Frequency and Type of Disclosure

Of the attorneys in cases with some discovery or disclosure, 58% said they provided or received initial disclosure in the sample case (Table 2). A considerable amount of disclosure occurred in districts that had opted out of the Rule 26(a)(1) requirements.[53] Our report of the incidence of disclosure may underestimate current practice, since some of the cases in the sample were filed before disclosure requirements were in effect or terminated before they reached the stage where disclosure would occur.

The likelihood of having disclosure in a case does not vary systematically by readily identifiable characteristics of cases, such as case type or stakes. Disclosure occurred in contract, tort, civil rights, and "other" cases at approximately equal rates. Similarly, disclosure was no more or less likely to occur in low or high stakes cases. In the vast majority of cases in which attorneys reported that disclosure took place, they reported that discovery occurred as well (89%), indicating that disclosure infrequently replaces discovery entirely.

B. Prevalence of Initial Disclosure Activity by District

To determine whether the incidence of disclosure found in the study is unusually high, as some might suggest given the reported resistance to disclosure, we examined our sample in light of what we know about implementation of initial disclosure. Using available information about initial disclosure rules[54] to classify the practices of all the districts represented in the sample, we classified the districts as follows:

---

[53] *See infra* § IV.6.B.

[54] *See* DONNA STIENSTRA, FEDERAL JUDICIAL CTR., IMPLEMENTATION OF DISCLOSURE IN UNITED STATES DISTRICT COURTS, WITH SPECIFIC ATTENTION TO COURTS' RESPONSES TO SELECTED AMENDMENTS TO FEDERAL RULE OF CIVIL PROCEDURE 26 6 (1997).

Table 13

Percentage of attorneys who did and did not use initial disclosure in their case, by type of disclosure requirement in district in which the case was filed*

	National rule in effect	Less stringent local variation	No disclosure required	Individual judge discretion
Disclosure (N=517)	73	73	35	37
No disclosure (N=411)	27	27	65	63

* The differences between attorneys who used disclosure and attorneys who did not are statistically significant.

(1) the national rule is fully in effect; (2) a less stringent form of initial disclosure is in effect by local rule or provision; (3) no disclosure is required by federal rule or local provision (opt out); and (4) individual judges are authorized by local rule to require disclosure in individual cases.

We then examined the attorneys' responses to determine whether initial disclosure occurred in their case, and we matched those responses with the district in which the sample case was filed. Unexpectedly, initial disclosure was reported in the sample case by more than a third of the attorneys practicing in districts classified as having opted out of Rule 26(a)(1)'s requirements (Table 13). These data—and the finding above that 58% of cases with some discovery also involved disclosure—suggest that initial disclosure requirements may be more prevalent than some believe. Why disclosure occurred in cases in nondisclosure districts is not clear, but one possibility is that individual judges in these districts are requiring disclosure.[55]

We also examined our sample population to determine whether the relatively high portion of cases subject to disclosure might be the result of a higher response rate from districts that require initial disclosure. By comparing the responses with the original sample, we were able to determine that this is not the case; the responses closely track the distribution of the sample cases (Table 14). The sample cases themselves are a random national sample, with no known characteristics that would make the sample unrepresentative of federal cases generally (with the proviso, of course, that the sample is drawn from cases likely to have discovery).

[55] It is also possible that some attorneys misreported. It is unlikely that attorneys reported informal exchanges as disclosure, since the questions about each were quite precise in what they were seeking. *See* WILLGING ET AL., *supra* note 16, app. B. at 63.

Table 14

Type of disclosure requirements in effect in the districts from which the sample cases were drawn and from which the responses were received*

	National rule in effect	Less stringent local variation	No disclosure required	Individual judge discretion
District of sample attorneys (N=2015)	31%	21%	26%	22%
District of responses (N=1178)	32%	21%	27%	20%

* None of the differences are statistically significant.

C. Form of Initial Disclosure

For attorneys who engaged in initial disclosure under Rule 26 or local requirements, the most frequent form of disclosure included both lists and copies of documents (Table 15). About a quarter of those who engaged in disclosure, however, reported that their entire disclosures consisted of the documents themselves, even though Rule 26(a)(1) requires only a list or description of documents.[56] Altogether more than three-quarters of the attorneys reported that at least some copies were provided. More attorneys indicated that they disclosed documents and other information than indicated that they received such information.

Table 15

Percentage of attorneys reporting various forms of initial disclosure*

	All Respondents	Plaintiffs	Defendants
Entire disclosure was in lists	23	25	22
Entire disclosure was in copies of documents	28	29	27
Disclosure included lists and copies of documents	49	47	51
Number of respondents	499	215	284

*None of the differences between plaintiffs' and defendants' responses are statistically significant.

[56] Local rules in a few districts require that disclosure be in the form of copies, not lists, of documents. *See, e.g.*, N.D. CAL. R. 16-5(b); D. NEV. R. 26-1(a)(2)(B).

D. Reasons for Nondisclosure

Of the attorneys who said there was no disclosure in their case, just about half reported that their case was exempt by district-wide local rules or other provisions (Table 16). Another 6% reported that their case was exempt by standing orders or because of case-by-case exemptions ordered by the district judge assigned to the case.

For the remaining half of the attorneys who had no disclosure in their case, it appears that disclosure rules were in effect in the district but were not applied in the sample case. This was usually for one of two reasons: (1) neither the parties nor the court took steps to initiate disclosure, or (2) disclosure did not apply because the case terminated before the disclosure deadline or was filed before disclosure rules went into effect. Very rarely did the parties stipulate out of disclosure.

Table 16

Percentage of attorneys reporting reason for lack of initial disclosure, in cases in which there was no initial disclosure

Reason	% (N=365)
District exempted all cases or this type of case	49
Assigned judge exempted all cases or this case	6
Parties stipulated that disclosure would not apply	4
No one began the process and court did not enforce disclosure	21
Rule 26(a) did not apply because case terminated early or case filed before the rule's effective date*	20

*These variables were added after recoding comments from "other" responses.

E. Perceptions of Initial Disclosure's Effects

When Rule 26 was amended in 1993, the rule drafters hoped it would have a number of effects, seven of which are shown in Table 17. For any single effect, at least a plurality, and usually a majority, of respondents said initial disclosure did not have that effect. Altogether, however, more than 80% of the respondents said disclosure had at least one of the desired effects. Among those who reported an effect, the vast majority said the effect was in the direction intended by the drafters of the 1993 amendments.

Specifically, respondents who reported an effect were more likely to say initial disclosure decreased their client's overall litigation expenses, the time from filing to disposition, the amount of discovery, and the number of discovery disputes. They also were more likely to

Table 17

Percentage of attorneys reporting specific effects of initial disclosure in their case

	Increased			Had no effect			Decreased		
Effect of initial disclosure on	All	Pl.	Def.	All	Pl.	Def.	All	Pl.	Def.
Your client's overall litigation expenses (N=522)	16	16	15	45	44	46	39	40	39
Time from filing to disposition (N=508)	7	9	5	62	57	65	32	33	31
Overall procedural fairness (N=508)	37	39	36	54	50	57	9	11	7
Fairness of case outcome (N=500)	25	26	24	70	67	72	5	6	4
Prospects of settlement (N=520)*	36	38	34	59	53	63	6	9	3
Amount of discovery (N=522)	10	13	8	47	46	47	43	41	44
Number of discovery disputes (N=483)	5	7	4	62	57	66	33	36	30

* Differences between plaintiffs' and defendants' responses are statistically significant.

say that initial disclosure increased overall procedural fairness, fairness of case outcome and the prospects for settlement.

In general, attorneys' views of the efficacy of disclosure do not appear to differ by whether they represented plaintiffs or defendants. In only one instance—disclosure's effects on the prospects for settlement—do evaluations of disclosure's effects differ significantly by party type, with plaintiffs' attorneys more likely than defendants' attorneys to see disclosure as increasing the prospects of settlement. Likewise, attorneys' evaluations of disclosure appear not to differ by the type of case being litigated or by the importance of nonmonetary issues.

At least one of disclosure's hoped-for benefits does, however, appear to differ by the size of the monetary stakes: attorneys in cases where monetary stakes were higher than $500,000 were less likely to report that initial disclosure increased overall procedural fairness than were attorneys in lower-stakes cases (29% versus 40%, respectively). Moreover, in the higher-stakes cases, plaintiffs' attorneys were notably more likely than defendants' attorneys to report a decrease in procedural fairness (25% versus 7%). Along similar lines, as discussed in the next section, attorneys in cases with stakes over $500,000 were more likely to find problems with initial disclosure, such as incompleteness, than were attorneys in lower-stakes cases (43% versus 16%).

Reports of disclosure's efficacy also appear to differ by case complexity and contentiousness. Attorneys in complex cases were more likely than attorneys in noncomplex cases to report that initial disclosure increased the amount of discovery conducted in their case (13% versus 6%). Similarly, attorneys in cases where relationships were contentious were more likely to say that initial disclosure increased the amount of discovery (27% versus 8%) and increased litigation expenses (29% versus 14%), while they were less likely to say disclosure increased the fairness of the outcome (19% versus 26%).

In short, these responses suggest that there is a subset of cases—a combination of those with high stakes, high complexity, or contentious relationships—in which initial disclosure was not as effective as in other cases.

F. Initial Disclosure and Disposition Time

Attorneys' reports that initial disclosure shortened disposition time (§ IV.6.E.) were corroborated by an examination of actual disposition time. We found that cases in which initial disclosure took place had shorter life spans than cases with no disclosure.[57] This relationship occurred independently of other variables in the study, such as case characteristics or case management practices. None of the case management practices we examined (such as meeting and conferring, limiting the amount of discovery, setting discovery cutoffs, or holding discovery conferences) were related to disposition time.

G. Problems with Initial Disclosure

Table 10 shows that 37% of the attorneys who participated in initial disclosure perceived one or more problems with its implementation. That rate of problem identification was somewhat higher than for depositions (26%) and expert disclosure (27%) but somewhat lower than for document production (44%).

As Table 18 shows, the incidence of any single type of problem with initial disclosure is modest. Complaints centered on incompleteness, failure to supplement, duplication, and lack of reciprocity. Respondents seldom mentioned satellite litigation (e.g., motions to compel or motions for sanctions).

The incidence of reported initial disclosure problems differed by several case characteristics. Problems were more likely to be reported

[57] This finding arose out of a multivariate survival analysis. *See* WILLGING ET AL., *supra* note 16, at 55.

Table 18

Percentage of attorneys reporting specific problems with initial disclosure, in cases where initial disclosure was reported

Type of problem	All Respondents	Plaintiffs*	Defendants*
Disclosure was too brief or incomplete.	19	21	17
Disclosure was excessive.	2	3	2
Some disclosed materials were also requested in discovery.	11	9	12
A party failed to supplement or update the disclosures.	12	12	13
A party disclosed required information and another party did not disclose required information.	11	12	10
Disclosure occurred only after a motion to compel or an order from the court.	6	6	5
Sanctions were imposed for failure to disclose.	1	1	1
Other	3	2	3
Number of respondents	517	223	294

* Differences between plaintiffs' and defendants' responses are not statistically significant.

in cases that lasted longer than a year, had monetary stakes greater than $500,000, were very complex, or involved very contentious relationships. On the other hand, we found no statistically significant differences between the presence of initial disclosure problems and the type of case, presence of nonmonetary stakes, type of party, practice setting, or number of years in the practice of law. Again, we see the difficulties in discovery—in this instance in initial disclosure—arising in cases that involved substantial sums of money and that were marked by complexity or contentiousness.

7. *With What Frequency Is Expert Disclosure Used? What Are Its Effects? What Kinds of Problems Arise in Expert Disclosure?*

A. Frequency of Expert Disclosure and Discovery

Of the attorneys who had some discovery in their case, most (73%) did not report any expert discovery or disclosure. Of the 319 attorneys who did, 71% said they disclosed a written expert report to an opposing party pursuant to Rule 26(a)(2) or a similar local provision, and 57% reported receiving such a report (Table 19).

Table 19

Percentage of attorneys reporting that specific types of expert disclosure or discovery occurred, in cases where some expert activity was reported

Type of activity	% (N=319)
Provide written expert report under 26(a)(2) or local provision	71
Receive written expert report under 26(a)(2) or local provision	57
Agree not to disclose expert report	4
Attend or conduct expert deposition	49
Conduct other expert discovery*	13

* Respondents reported, among other things, that they designated experts, sent or received expert interrogatories, or examined expert evidence such as medical records.

In cases that involved expert discovery or disclosure, about half of the attorneys reported participating in expert depositions. Only 4% of the attorneys who conducted expert discovery said they agreed not to disclose expert reports.

Attorneys in tort cases (46%) were far more likely to have engaged in expert disclosure than were attorneys in contracts (13%), civil rights (17%), or "other" (13%) cases. Attorneys who rated their case as very or somewhat complex and whose cases lasted longer than a year were also more likely to report that expert disclosure occurred in their case. As the monetary stakes increased, the likelihood of expert disclosure increased progressively from 10% of attorneys in cases with less than $4,000 at stake to 36% of attorneys in cases with more than $2 million at stake. The likelihood of engaging in expert disclosure did not differ, however, by the importance of nonmonetary stakes.

B. Perceptions of the Effects of Expert Disclosure

The most frequent response to questions about expert disclosure's effects was that it had none (Table 20). Attorneys were especially unlikely to see an effect on disposition time, settlement pressures, and fairness of the case outcome. At most, just under half the attorneys reported that one of the benefits of expert disclosure—increased procedural fairness—had been achieved. If, however, we consider responses to all five possible effects, over two-thirds of the attorneys responding to this question reported that at least one of the intended benefits was realized in their case.

Regarding litigation expenses, 27% of the attorneys who had engaged in expert disclosure reported that it increased expenses, not an

Table 20

Percentage of attorneys reporting specific effects of expert disclosure, in cases where expert disclosure was reported

Effect of expert disclosure requirement on	Increased			Had no effect			Decreased		
	All	Pl.	Def.	All	Pl.	Def.	All	Pl.	Def.
Client's overall litigation expenses (N=241)	27	31	22	43	40	46	31	29	32
Time from filing to disposition (N=232)	10	14	7	72	69	75	18	17	19
Overall procedural fairness (N=234)*	47	49	45	46	40	51	8	12	4
Fairness of case outcome (N=231)	37	38	37	56	52	60	7	10	3
Pressure to settle (N=230)	37	41	32	61	55	66	3	3	3

* Differences between plaintiffs' and defendants' responses are statistically significant.

unexpected outcome given the requirement for a more comprehensive expert's report. When asked separately, however, about the expense of expert disclosure, only 9% reported that it was too expensive, suggesting that perhaps some of the added cost was expected and was not seen as problematic.

More surprising in some ways is the 31% who said expert disclosure decreased litigation expenses. Perhaps for some of these attorneys the written report served as a substitute for an expensive deposition, as the drafters of Rule 26(a)(2) hoped.

Whether or not expert disclosure increased or decreased litigation expenses, attorneys often perceived it as increasing procedural fairness, although those who said it decreased litigation expenses were far more likely to say it increased procedural fairness (68%) than were those who said it increased litigation expenses (40%). Both groups, however, reported increased procedural fairness far more often than they reported decreased fairness, suggesting that even when expert disclosure increases expenses it is often seen as increasing procedural fairness as well.

C. Problems With Expert Disclosure

Among the four principal types of discovery examined earlier (Table 10), expert disclosure had the second lowest rate of reported problems—27% of the attorneys who used expert disclosure encountered problems with it. When we look more closely at the specific kinds

Table 21

Percentage of attorneys reporting problems with expert disclosure, in cases where expert disclosure was reported

Type of problem	All respondents (N=259)	Plaintiffs* (N=124)	Defendants* (N=135)
Expert disclosure was too brief or incomplete.	13	11	14
Expert disclosure was too expensive.	9	10	8
A party failed to supplement or update its disclosures.	9	6	12
Other	4	3	5

* Differences between plaintiffs' and defendants' responses are not statistically significant.

of problems that arose in expert disclosure, we find that the most frequent problem was disclosures that were too brief or incomplete, reported by 13% of the attorneys (Table 21). Others reported that the process was too expensive (9%) or that a party failed to supplement or update its expert disclosures (9%).

Attorneys in cases with stakes higher than $500,000 were almost twice as likely to report problems with expert disclosure as attorneys in lower-stakes cases (39% versus 21%). Likewise, attorneys in very contentious cases (54% of them) and somewhat contentious cases (32%) were far more likely to report expert disclosure problems than attorneys in non-contentious cases (15%).

Overall, however, the incidence of problems is quite low and notably lower than the number of attorneys who encountered problems with initial disclosure (37%) and document production (44%) (Table 10).

8. *With What Frequency Are the Other 1993 Discovery Rule Amendments Used (Meet-and-Confer Requirements, Discovery Planning, Limits on Deposition Conduct, and Limits on Interrogatories and Depositions)? What Are Their Effects?*

A. Meeting and Conferring

i. *Discovery planning*

About 60% of the attorneys reported that they met and conferred with opposing counsel, either by telephone, correspondence, or in person, to plan for discovery in accordance with Rule 26(f) or a similar local provision.

Table 22

Percentage of attorneys reporting that they met and conferred, by percentage of reported issuance of discovery plan or scheduling order, in cases involving some discovery or disclosure*

	Discovery plan or scheduling order	No discovery plan or scheduling order	Total
Meet and confer	64	11	75
No meet and confer	13	11	25
Total (N=804)	77	23	100

* These differences are statistically significant.

Attorneys in complex cases (69%) were more likely to have met and conferred than attorneys in cases that were not complex (54%), but even the majority of those in noncomplex cases had such conferences. The frequency of meeting and conferring did not differ meaningfully by type of case, size of monetary stakes, the presence of nonmonetary stakes, or the contentiousness of the parties. Further, the likelihood of meeting and conferring appears not to be related to the number of discovery problems or case management problems reported by the attorneys.

One purpose of meeting and conferring is to develop a plan for discovery, yet other methods for developing a discovery plan are also available. Therefore, to determine the number of attorneys whose cases were subject to discovery planning, we included those who had met and conferred, those who reported that the court had issued a discovery plan or scheduling order, or both. We found that for the great majority of attorneys in our sample (77%) a discovery plan or scheduling order had been entered in their case. A plan or order was especially likely in cases where the attorneys had met and conferred—64% of these attorneys reported a plan or order—but even for about half of the attorneys who did not meet and confer, a plan or order was entered (Table 22).

Not surprisingly, discovery planning and orders were less likely to be entered in cases with no formal discovery or disclosure. Likewise, cases terminated within 180 days were less likely to have discovery plans or scheduling orders. The incidence of discovery planning differed minimally by other case characteristics, such as the size of the monetary stakes, complexity, contentiousness, or nature of suit.

Among the attorneys who reported that a scheduling order or discovery plan had been issued, 90% also reported that the judge had held a conference to consider a discovery plan. For only 10% of the

attorneys, then, was the scheduling order or discovery plan entered without consultation with the judge.

The median time limit imposed for completion of discovery was six months, with 75% of the attorneys reporting that they were limited to eight months or less. Although complaints about judicial management of discovery were uncommon, the two most frequently cited problems were that the time allowed for discovery was too short (7% of all respondents) and that the court was too rigid about deadlines (5%).

ii. *Perceived effects of meeting and conferring/discovery planning*

The majority of the 60% of attorneys who had met and conferred did not think meeting and conferring had any effect on litigation expenses, disposition time, fairness, or the number of issues in the case (Table 23). For those who thought there had been an effect, however, the effect was most often in the desired direction: lower litigation expenses (29%), shortened disposition time (29%), greater procedural fairness (33%), greater outcome fairness (21%), and fewer issues in the case (24%).

Table 23

Percentage of attorneys reporting specific effects of meeting and conferring*

Effect of meeting and conferring on	Increased			Had no effect			Decreased		
	All	Pl.	Def.	All	Pl.	Def.	All	Pl.	Def.
Client's overall litigation expenses (N=646)	17	17	18	54	56	51	29	27	31
Time from filing to disposition (N=623)	9	11	8	62	58	65	29	31	28
Overall procedural fairness (N=619)	33	33	33	61	59	62	7	8	5
Fairness of case outcome (N=597)	21	20	22	73	73	73	5	7	4
Number of issues (N=619)	6	7	6	70	71	68	24	22	26

* None of the differences between plaintiffs' and defendants' responses are statistically significant.

B. Depositions

i. *Frequency of depositions*

For attorneys whose cases involved some discovery or disclosure, 67% reported that depositions had been conducted in their case (Ta-

ble 2). The median number of individuals deposed was four and the mean was six. Twenty-five percent (25%) of the attorneys reported that only one or two individuals were deposed, and for 75% of the attorneys, no more than seven individuals were deposed (Table 24).

Table 24

Frequency and length (hours) of reported depositions

	Number of deponents (N=592)	Average length (N=579)	Total hours (N=587)	Length of longest deposition (N=572)
75th percentile	7	5	24	7
Median	4	3	10	4
25th percentile	2	2	5	3
Mean	6	4	25	6

The median number of hours spent by these attorneys in all depositions was ten. Again, the lowest—25%—spent no more than five hours in depositions, while 75% of the attorneys spent no more than twenty-four hours in depositions. The high mean number of hours—twenty-five compared to a median of ten—suggests there were a small number of cases with a very high number of hours. Overall, however, the median length of the longest deposition is only four hours, and 75% of the attorneys reported that the longest deposition was no longer than seven hours.

In 1991, the Advisory Committee on Civil Rules proposed but did not adopt a six-hour limit on the length of depositions. Had a six-hour limit been in effect it would have affected about 30% of the cases; in those cases the district judge would have been authorized to make exceptions on a case-by-case basis. In a separate FJC study of local rules imposing durational limits on depositions or authorizing judges to impose such limits when needed, we have been unable to find reliable evidence that such limits have achieved their intended effects.[58]

[58] *See* LEARY & WILLGING, *supra* note 27, at 10–11. Seven district courts currently have local rules imposing presumptive time limits—generally six hours—on the duration of depositions. Another six district courts expressly empower judges to impose limits at their discretion. The median length of depositions does not appear to differ across courts with or without such local rules. *See id.* at 10 tbl.3.

Leary & Willging also found that in districts with local rules limiting the length of depositions, about twice as many attorneys reported problems with deposition length as did so in districts with no rule limiting deposition length. This does not necessarily mean that the local rules are ineffective. It may be that having a higher rate of problems is the reason the courts adopted such

Attorneys were more likely to have participated in depositions in tort cases (83%) and civil rights cases (81%) than in contract cases (58%) or "other" cases (57%). The likelihood of depositions also differed by the stakes in the litigation and the complexity of the case but not the contentiousness of the case. Among attorneys in cases with more than $2 million at stake, 85% had participated in depositions, while 50% of those with less than $4000 at stake had used depositions. Likewise, among attorneys in very complex cases, 81% had participated in at least one deposition, compared to 72% of attorneys in somewhat complex cases and 67% in noncomplex cases.

ii. *Problems with depositions*

Far fewer attorneys reported problems with deposition practice (26% of those who reported any discovery problems) than reported problems with document production (44%), which is the most problematic form of discovery. The most frequent specific complaints about depositions were that too much time was taken (12% of those who participated in a deposition) or that an attorney coached a witness during a deposition (10%) (Table 25).

When attorneys complained that "too much time was taken in some or all depositions," the average length of those depositions was more than twice as long as depositions in other cases.[59] In fact, a majority of these complaints arose in cases that had the longest amount of time spent in depositions (above the 90th percentile).

In 1993, the Rules Committee also amended Rules 30(d)(1) and (3) to proscribe using objections in an argumentative or suggestive manner, to limit attorneys' instructing clients not to answer questions, and to provide consequences for other unreasonable conduct.[60] In our sample, small numbers of attorneys reported problems in three areas of deposition conduct: that an attorney coached a witness (10%), instructed a witness not to answer (8%), or otherwise acted unreasonably (9%) (Table 25). These responses suggest that the 1993 amendments have not entirely eliminated these problems. This study was not designed, however, to identify the incidence of such behavior before

---

rules, and the rules may have been effective in reducing an originally higher rate. Without knowing the rate of preexisting problems, we cannot determine the efficacy of such rules. In any case, it is important to note that the rate of problems in both types of districts is relatively low, with 10% being the high rate. *See id.* at 11 tbl.4.

[59] *See* Memorandum from Tom Willging to Discovery Subcommittee 2–3 (Dec. 22, 1997) (on file with author and law review) [hereinafter Memorandum from Willging].

[60] *See supra* note 28 and accompanying text.

Table 25

Percentage of attorneys reporting problems with depositions, in cases where there were depositions*

Type of problem	All Respondents	Plaintiffs	Defendants
There were too many depositions.	4	4	5
Too much time was taken in some or all depositions.	12	14	11
An attorney coached a witness during a deposition.	10	10	11
An attorney improperly instructed a witness not to answer.	8	9	7
An attorney acted unreasonably to annoy, embarrass, or oppress the deponent or counsel.	9	11	7
Other	3	3	3
Number of respondents	579	257	322

* None of the differences between plaintiffs' and defendants' responses are statistically significant.

1993 and thus cannot test what the incidence would have been if the amendments had not been adopted.

Few respondents (4%; twenty-four attorneys) reported that there were too many depositions. Of those who did, 75% reported participating in more than eight depositions, and 50% reported participating in fifteen or more depositions. Moreover, half of the attorneys who complained about the number of depositions reported spending fifty or more hours in depositions, and 25% reported spending more than 120 hours in depositions. The vast majority of complaints about the number of depositions arose in cases that had the highest numbers of depositions (above the 90th percentile) in the sample.[61]

Plaintiffs' and defendants' attorneys did not differ in their reports of problems with depositions, whether considering number, length, or attorney conduct. Problems were reported far more frequently, however, in complex cases, contentious cases, and civil rights cases. Among attorneys in very contentious cases, 66% reported problems with depositions, while 35% of those in somewhat contentious cases and 10% in non-contentious cases did. Among attorneys in civil rights cases, 35% reported deposition problems, compared to 22% of attorneys in tort cases and 13% in contract cases. Finally, attorneys in very complex

[61] *See* Memorandum from Willging, *supra* note 59, at 2.

cases were far more likely to report deposition problems (41% of them) than were attorneys in somewhat complex (24%) or noncomplex (22%) cases.

9. *With What Frequency Does Document Production Occur? What Kinds of Problems Arise in Document Production?*

A request for production of documents was the discovery device most frequently used by attorneys in our sample, reported by 84% of those who said some discovery or disclosure activity had taken place in their case (Table 2). Document production also generated the highest rate of reported problems; 44% of the attorneys who said document production occurred in their case reported one or more types of problems with this discovery activity (Table 10).

The most common problems in document production were failure to respond adequately (28% of attorneys who engaged in document production) and failure to respond in a timely fashion (24%) (Table 26). Those representing plaintiffs were more likely to complain that a party failed to respond adequately, while those representing defendants were more likely to complain that requests were vague or sought an excessive number of documents.

Document production problems were far more likely to be reported by attorneys whose cases involved high stakes, but even in low-to-medium stakes cases ($4000 to $500,000), 36% of the attorneys reported problems with document production. In medium-to-high stakes cases ($500,000 to $2 million), 56% of attorneys reported such prob-

Table 26

Percentage of attorneys reporting problems with document production, in cases where document production was reported

Type of problem	All Respondents	Plaintiffs	Defendants
One or more requests were vague.*	16	12	20
An excessive number of documents were requested*	15	11	19
Materials provided were excessive or disordered	8	10	7
A party failed to respond in a timely fashion	24	25	24
A party failed to respond adequately.*	28	33	24
Other	3	4	2
Number of respondents	743	335	408

* Differences between plaintiffs' and defendants' responses are statistically significant.

lems, and in high stakes cases (more than $2 million), 75% reported document production problems.

In a similar vein, attorneys were far more likely to report document production problems in cases they labeled as very complex (66% of these attorneys) than in cases that were somewhat complex (44%) or not at all complex (35%). And attorneys were more likely to report such problems in very contentious cases (77% of these attorneys) than in somewhat contentious cases (54%) or in cases that were not at all contentious (29%).

Of all the discovery devices we examined, document production stands out as the most problem-laden. While the causes are elusive, high stakes, complexity, and contentiousness more often mark the cases where attorneys report document production problems. Despite these problems, however, document production is not the most costly part of discovery, as the next section demonstrates.

10. *What Are the Expenses for Specific Discovery Activities and How Do Those Activities Relate to Total Litigation Costs and Case Duration?*

Earlier we reported on the overall expense of discovery (§ IV.2.) and the proportion of discovery expenses attributable to discovery problems (§ IV.4.). In this section, we report the costs of several specific discovery activities.

Table 27 shows the mean percentage of discovery expenses allocable to each of the principal types of discovery. That is, considering

Table 27

Allocation of discovery expenses for cases with some discovery expense* (N=921)

	Mean percentage of discovery expense		
Discovery Activity	All	Plaintiffs	Defendants
Meet and confer/discovery planning	12	12	13
Initial disclosure	16	17	16
Expert disclosure or discovery	6	8	5
Depositions	30	29	31
Request for and/or production of documents	16	15	16
Interrogatories	13	13	13
Other discovery activities	6	6	6

* None of the differences between plaintiffs' and defendants' responses are statistically significant.

the total costs of discovery, the table shows the portion due to each of seven activities.

We see that depositions accounted for almost one-third of all discovery expenses, while production of documents (16%), initial disclosure (16%), and interrogatories (13%) accounted for substantially less, and expert disclosure consumed only a small portion of all discovery expenses. For each discovery activity, there was no meaningful difference between the percentages reported by plaintiffs' and defendants' attorneys.

The fact that expert discovery accounts for only 6% of all discovery expenses does not imply that expert discovery is a low-cost activity. Table 27 is based on all cases in which there was some discovery, a large number of which had no expert discovery or disclosure. Thus, the percentage of discovery costs attributable to expert discovery is probably due to the relatively low number of cases with any such expense.

To correct for this problem, Table 28 provides information about the typical cost of each type of activity when that activity occurred in the case. It shows that when expert discovery occurred, it was the second most expensive of the discovery activities, with median expenses of $1375 per client. The most expensive discovery activity, by a considerable margin, was depositions, with median costs per client of $3500.

At least two notable points emerge from Tables 27 and 28. First, depositions accounted for about twice as much expense as any other discovery activity, whether on the basis of overall discovery expense (Table 27) or on the basis of deposition expense among cases with any deposition expense (Table 28). Second, production of documents did not result in unusually high expenses. Even at the 95th percentile (i.e., only 5% of attorneys reported higher costs than this), the expenses for document production were lower than expenses for depositions and expert disclosure. Keep in mind that these are expenses that flow through the attorney, not expenses the client may have incurred separately (e.g., employee time spent identifying or reviewing documents).

How do specific discovery activities relate to total litigation costs and delays? As we saw earlier (§ IV.2.D.), as the number of hours spent in depositions increases so does the total cost of litigation. In addition, as the percentage of discovery costs spent on depositions rises so does time from filing to disposition.[62] In contrast, where initial disclosure was reported to have been used, disposition time was lower (§ IV.5.).

---

[62] *See* WILLGING ET AL., *supra* note 16, at 54.

Table 28

Expenses per client for indicated discovery activity, for cases with some such activity

Activity	95th percentile	Median	10th percentile	# of respondents
Meet and confer/discovery planning	$8,800	$600	$75	672
Initial disclosure of documents	$9,000	$750	$105	608
Expert disclosure or discovery	$31,000	$1,375	$160	342
Depositions	$56,000	$3,500	$440	602
Request for and/or production of documents	$23,000	$1,100	$150	682
Interrogatories	$16,000	$1,000	$160	658
Other	$21,000	$1,300	$110	179

We also saw earlier (§ IV.2.D.) that the percentage of costs attributable to document production is significantly related to total litigation costs. We see in Tables 27 and 28 that the percentages and absolute costs of document production are quite modest in relation to other discovery activities. It is only as the *percentage* increases that document production's impact on overall cost appears.

Because we expected document production to represent very large expenses in at least a notable minority of cases, we pursued separate analyses of total discovery expenses and of document production expense for different types of cases. Tables 29 and 30[63] show the results. Both tables suggest that cases with very high overall discovery expenses and very high expenses for document production tend to arise in the miscellaneous category of "other" cases rather than in contract, tort, or civil rights cases.

Examining the "other" category more closely, we found that patent, trademark, securities, and antitrust cases stood out for their high discovery expenses. Table 31[64] shows the breakdown of discovery expenses for all patent, trademark, securities, and antitrust cases in our sample, along with the same information for all other types of cases

[63] In Table 30, plaintiff and defendant expenses associated with document production differed only modestly. Both the median and 80th percentiles were about 50% higher for plaintiffs in contract cases, but these measures were higher for defendants in all other case types (about 40% higher in civil rights cases, 25% higher in tort cases, and 10% higher in "other" cases).

[64] In Table 31, we report the 80th percentile because not all respondents reported expenses in every category, so lower percentiles reflect values too small to be informative. Because of the extreme expenses reported in a few instances, the mean is similarly uninformative. See *supra* note 34.

Table 29

Discovery expenses per client by type of case, for cases with some discovery expense

Case type	95th percentile	Median	10th percentile	# of respondents
Contract	$64,000	$4,000	$300	199
Tort	$88,000	$6,600	$750	236
Civil Rights	$58,000	$5,700	$490	240
Other	$300,000	$4,000	$400	224

Table 30

Expenses per client for requests for document production, for cases with such expense

Case type	95th percentile	Median	10th percentile	# of respondents
Contract	$15,600	$975	$150	151
Tort	$17,600	$1,100	$150	190
Civil Rights	$10,800	$1,200	$120	182
Other	$88,200	$1,250	$165	159

and for those "other" cases involving at least $40,000 in discovery expenses. This permits comparison of two groups of high-expense cases and all other cases. It also allows us to see whether particular types of discovery are responsible for high discovery expenses.

Table 31 suggests that no particular type of discovery is responsible for excessive discovery expenses. We singled out patent, trademark, securities, and antitrust cases as a group because that group generally has high discovery expenses, but the distribution of discovery expenses across types of discovery activity does not differ notably from the distribution in "other" cases. Deposition expenses are very high, but not disproportionately so, compared to either cases with expenses of at least $40,000 or all "other" cases.[65]

[65] Although it appears that the expenses for some discovery activities increase substantially more than for others, the differences are not likely to be statistically significant due to the limited number of responses and the fact that we focus here on the 80th percentile.

Table 31

80th Percentile of discovery expenses by type of discovery activity, for respondents reporting any discovery expense

Activity	80th percentile, patent, trademark, securities, and antitrust cases	80th percentile, all other cases with at least $40,000 discovery expenses	80th percentile, all other cases
Meet and confer/ discovery planning	$12,000	$10,000	$1,250
Initial disclosure of documents	$2,400	$12,000	$1,600
Expert disclosure or discovery	$42,000	$11,000	$1,100
Depositions	$135,000	$51,000	$7,400
Request for and/or production of documents	$67,000	$27,000	$2,900
Interrogatories	$47,000	$18,000	$2,300
Number of respondents	53	105	888

11. *What Attorney-Related Factors Are Associated with Discovery Problems, Litigation Costs, and Case Duration? To What Extent Are Discovery Problems Due to Judicial Case Management?*

A. Attorney/Client Factors Related to Discovery Problems

To what extent do attorneys and clients contribute to problems with discovery? More than half of the attorneys identified intentional delays or complications as a moderate or major cause of discovery problems, and about 40% said lack of client cooperation, pursuit of disproportionate discovery, and incompetence or inexperience of counsel contributed to discovery problems (Table 32).

Combining the "moderate" and "major" categories in Table 32, we see that plaintiffs' attorneys were considerably more likely to attribute perceived discovery problems to intentional actions by a party or attorney. Defendants' attorneys, on the other hand, were more likely to attribute problems to the incompetence or inexperience of counsel. On the whole, these data suggest that intentional activity is thought to play a significant role in creating discovery problems.

Multivariate analyses revealed a relationship between two specific attorney-related factors and litigation costs and disposition time. First, attorneys from law firms with more than eleven attorneys reported

Table 32

Percentage of attorneys reporting the contributions made by attorneys and clients to problems with discovery, in cases with perceived discovery problems

Contributing factor/ Level of contribution	None			Moderate			Major		
	All	Pl.	Def.	All	Pl.	Def.	All	Pl.	Def.
Intentional delays or complications (N=332)*	45	38	53	28	28	28	27	35	19
Lack of cooperation by a client (N=325)	54	52	57	29	27	30	17	21	14
Pursuit of discovery disproportionate to the needs of the case (N=348)	62	66	59	21	20	22	17	14	19
Incompetence or inexperience of counsel (N=337)*	59	73	48	22	15	27	19	12	25

* Differences between plaintiffs' and defendants' responses are statistically significant.

higher costs than attorneys from smaller firms, a finding similar to one found in the RAND study.[66] We might hypothesize that clients seek large law firms when they expect litigation to be contentious and costly,[67] but the relationship we found between firm size and litigation costs exists independently of factors like complexity, contentiousness, or the amount at stake in the litigation. Second, when attorneys billed on an hourly basis (as opposed to a contingent fee or some other method), the time from filing to disposition was longer.

B. Judicial Factors Related to Discovery Problems

When judges were involved in discovery, as 81% of the attorneys said they were, they were far more likely to have been involved in the planning phase of discovery than to have decided motions or imposed sanctions. Of the instances in which attorneys reported some court involvement in discovery or disclosure, the court imposed time limits on the completion of discovery in 80% of those instances. The median time limit imposed by the court was six months; 75% of the limits were shorter than eight months and 25% were four months or less.

[66] *See* RAND REPORT, *supra* note 13, § II tbl. 2.7.

[67] *See* Bryant G. Garth, *Two Worlds of Civil Discovery: From Studies of Cost and Delay to the Markets in Legal Services and Legal Reform*, 39 B.C. L. REV. 597, 605 (1998) ("the high stakes, high conflict cases involve clients who pay for the services of lawyers as warriors, and that is what they usually get").

As we saw earlier, judicial imposition of time limits on discovery (§ IV.5.) had no statistically significant relationship to case disposition time. Discovery cutoffs also had no significant relationship to the total cost of litigation. This finding was clear under both multivariate and bivariate analyses.[68] As with our finding on discovery cutoffs and disposition time, our finding regarding discovery cutoffs and litigation cost differs from RAND's findings.[69] Our earlier discussion of the reasons for these differences (§ IV.5.) applies here as well.

Of the instances in which a judge was reported to have been involved in discovery or disclosure, 57% of attorneys indicated the judge held a conference by telephone, correspondence, or in person, to consider a discovery plan; 42% reported that the judge discussed discovery issues at another conference; 25% said the court ruled on a discovery motion; and 20% said the court enforced the federal rules' limits on the number of interrogatories and depositions.

Presented with a list of nineteen types of potential court management problems and an invitation to report any other problems, the vast majority of attorneys (83% of those in cases with some discovery or disclosure) reported no problems with the court's management of disclosure or discovery. Most of the specific problems were encountered by 2% or fewer of the attorneys who had some discovery in their case. The problems most often encountered by attorneys—which were encountered by few—were the following: the time allowed for discovery was too short (7% of those in cases with some discovery), the court was too rigid about deadlines (5%), and rulings on discovery motions took too long (4%).

Overall, the problems with court management of discovery can be collapsed into four groups, as in Table 33. While the findings do not suggest a high level of court management problems, it appears that

---

[68] Using multiple regression analysis, described *supra* note 40, we found no strong or statistically significant relationship between the total cost of litigation and any of the forms of case management studied (such as limits on the length of time or the amount of discovery, issuance of a discovery plan, or court conferences to address discovery issues). *See* WILLGING ET AL., *supra* note 16, at 53–55. In addition to the multiple regression analysis, we examined the bivariate (two-variable) relationship between discovery cutoff orders and several measures of litigation cost. We found very little relationship between discovery cutoffs and total discovery and disclosure expenses ($r=.09$; $p=.07$), total expenses due to discovery and disclosure problems ($r=.13$; $p=.08$), total litigation expenses ($r=.10$; $p=.04$), or percentage of total litigation expenses associated with discovery or disclosure ($r=.03$; $p=.58$).

[69] *See* RAND REPORT, *supra* note 13, § III(F)(1) (finding that "total lawyer work hours significantly decrease as the number of district median days to discovery cutoff gets smaller," estimating that "a sixty-day reduction in the district median cutoff . . . will reduce lawyer work by fifteen hours," and expressing confidence that "this policy will lead to at least some reduction in work hours").

Table 33

Percentage of attorneys reporting specific types of court management problems, in cases with some discovery

Types of court management problems	% (N=828)
Discovery planning and implementation problems	13
Rulings on motions problems	7
Discovery limitations problems	5
Sanctions problems	4

the most frequent problem area is planning and implementation (i.e., setting and enforcing deadlines). Within that activity, the most frequent complaints were that the time allowed for discovery was too short and that courts were too rigid about deadlines. Regarding discovery limits, few attorneys complained that limits on time or on the amount of discovery were too loose or that judges were too willing to grant extensions. In fact, they were as likely to say limitations were too restrictive as to say they were too lenient.

Problems with court management, like discovery problems generally, were far more likely to be reported by attorneys whose cases were very complex, very contentious, and had very high stakes. Attorneys in complex cases (39% of these attorneys) were more than twice as likely to report court management problems as were attorneys in cases rated as somewhat complex (19%) or not at all complex (14%). Similarly, attorneys in very contentious cases (43% of attorneys) were more likely to report court management problems than were attorneys in cases that were somewhat contentious (24%) or not at all contentious (12%). And finally, attorneys in cases with stakes of $500,000 to $2 million (25% of these attorneys) and in cases with stakes greater than $2 million (36%) were more likely than those in lower-stakes cases (16%) to report problems with court management. There were no meaningful differences by party represented, type of case, or the attorney's level of experience.

Although court management was perceived as a problem in some types of cases, for the most part, attorneys had few complaints about the court's management of their case. In fact, as discussed further in Section IV.13., they called for increased case management.

12. *Is Nonuniformity in the Disclosure Rules a Problem?*

In examining the issue of nonuniformity, we limited the inquiry to the disclosure rules and distinguished between nonuniformity across

Table 34

Percentage of attorneys holding certain opinions regarding the effect of nonuniformity concerning disclosure within a district and across districts

Attorney opinion	Within a district* (N=949)	Across district** (N=765)
There is no significant lack of uniformity	47	13
Lack of uniformity creates serious problems	6	16
Lack of uniformity creates moderate problems	21	44
Lack of uniformity creates minor or no problems	27	28

*Responses of "No opinion" (N=151) and "Other" (N=17) have been removed.
**Responses of "No opinion" (N=333) and "Other" (N=20) have been removed.

districts and nonuniformity within districts. There is considerably greater concern about nonuniformity across districts than within districts.

A. Nonuniformity Across Districts

Among attorneys who have an opinion on the issue (30% did not), 60% say nonuniform disclosure rules across districts create moderate to serious problems (Table 34). The largest percentage—44%—say the problem is moderate, while 16% rate it as serious. The balance of attorneys—41%—say there is no lack of uniformity or, if there is, it is not a problem.[70] Attorneys who practice in multiple districts are considerably more likely to identify nonuniformity in disclosure as a problem than are attorneys who practice in a smaller number of districts.

B. Nonuniformity Within Districts

In contrast to opinions about nonuniformity across districts, relatively few attorneys (6%) think serious problems are created by nonuniform disclosure requirements within the district where the study case was filed. In fact, nearly half the attorneys with an opinion on this issue say there is no significant lack of uniformity in the district.[71] Coupled

[70] Most attorneys who had no opinion on uniformity across districts said their federal practice takes place primarily in one district (86%), whereas about 50% of those who practiced in more than one district did have an opinion on uniformity across districts. The attorneys with no opinion were far more likely (48% of them) to report that 15% or less of their practice was in federal court than attorneys who expressed opinions (21%). Of the attorneys who expressed opinions on the subject, 76% had more than 15% of their practice in federal court.

[71] Also in contrast to the question about uniformity among districts, only 13% of attorneys did not have an opinion on the issue of uniformity within the district where their case was filed.

with the 27% who say the problem is at most minor, nearly 75% of the attorneys think nonuniformity within a district is not a problem. Anecdote has suggested that attorneys often face a bewildering array of procedural rules within districts. Our findings suggest this is generally not the case for disclosure.

13. *What Changes Would Be Likely to Reduce Discovery Expenses? If Change Is Necessary, What Direction Should It Take? Should Change Occur Now or Later?*

We asked attorneys, in several different ways, what changes, if any, should be made in the way discovery is conducted. In the discussion below we focus first on changes aimed at reducing problems and expense in discovery. We then turn to the question of uniformity in the rules—specifically whether uniformity is important and, if so, what form it should take in the case of disclosure.

A. Changes Likely to Reduce Discovery Problems and Expenses

Table 35 sets out thirteen changes that might theoretically reduce discovery expenses. It shows, for both the specific case and cases in general, the percentage of attorneys who said the change would have the desired effect without unreasonably interfering with a fair resolution of the case.

The change most likely to reduce discovery expenses, in the view of these attorneys, is to increase the availability of judges to resolve discovery disputes. Eighteen percent (18%) said this would have helped in the specific case, and 54% expect it would help in civil cases generally. The related concept of increasing court management of discovery also ranked high as a means for reducing discovery expenses, with 13% (fourth-ranked) saying it would have reduced expenses in the specific case and 37% (fifth-ranked) saying it would do so generally.

The second most promising change, both for the specific case and in general, would be a uniform rule requiring disclosure: 17% think it would have helped in the specific case and 44% say this reform would generally serve to reduce discovery expenses.[72]

The third and fourth most-favored changes both involve controls on attorney behavior through more frequent and/or more severe

[72] Yet the 17% saying a uniform rule would have reduced expenses in the specific case is considerably lower than the 39% who, after experiencing initial disclosure in the case at hand, said it had decreased their client's expenses (Table 17). It is not clear what explains the discrepancy, though it is possible that a "uniform national rule," as the option was phrased, is not seen as achieving more than the federal or local provision under which disclosure was required in the sample case.

Table 35

Percentage of attorneys with certain opinions about whether specific changes in rules or case management practice would be likely to reduce expenses without interfering with fair case resolution

(1) Change in rule or case management practice	(2) Decrease expenses in this case	(3) Decrease expenses generally		
		All	Pl.	Def.
Adopting a uniform national rule requiring initial disclosure*	17	44	50	40
Deleting initial disclosure from the national rules	12	31	29	33
Narrowing the definition of what is discoverable (Rule 26(b))*	12	31	22	38
Narrowing the definition of what documents are discoverable (Rule 34)*	11	30	23	37
Limiting—or further limiting—the time within which to complete discovery	8	19	20	18
Limiting—or further limiting—the number of depositions	7	23	23	23
Limiting—or further limiting—the maximum number of hours for a deposition*	9	27	30	24
Limiting—or further limiting—the number of interrogatories	8	26	27	26
Increasing court management of discovery	13	37	35	39
Increasing availability of district or magistrate judges to resolve discovery disputes	18	54	55	53
Imposing fee-shifting sanctions more frequently and/or imposing more severe sanctions for violations of discovery rules or orders	14	42	41	42
Adopting a civility code for attorneys	13	42	44	40
Other change	2	5	6	4
Number of respondents	1036	1036	474	562

*Differences between plaintiffs and defendants are statistically significant.

fee-shifting sanctions and through adoption of a civility code for attorneys. For each change, 42% of the attorneys thought it would reduce expenses generally, while 13–14% said it would have done so in the specific case.

Plaintiffs' attorneys (50% of them) were more likely than defendants' attorneys (40%) to predict cost savings generally from a uniform national rule requiring initial disclosure (Table 35, item 1, column 3). Defendants' attorneys, on the other hand, were more likely to predict cost savings from narrowing the scope of discovery, both in general

(Table 35, item 3, column 3) and in relation to document production (Table 35, item 4, column 3). This prediction was also more likely to be made by those who practiced in four or more districts and those in firms with ten or more attorneys.

In reading Table 35, a word of caution is in order. Note that for every option, substantially more attorneys predict a general effect (column 3) than would expect there to have been an effect in the specific case (column 2). Consider, for example, item 3, column 3, which indicates that 31% of the attorneys in our sample think discovery expenses would be reduced by a uniform national rule narrowing the definition of what is discoverable. This does not necessarily mean that those attorneys believe narrowing the scope of discovery will do so in all cases or even in 31% of the cases. One might reasonably read column 3 as predicting that generally there will be a positive effect, namely, that litigation expenses will be reduced without interfering with fair case resolutions.

Column 2, which is based on the experience of attorneys in actual cases, may reflect more realistically the frequency with which the hoped-for effects would materialize. On the other hand, we should keep in mind that the responses in column 2 do not necessarily reflect the extent to which the changes would reduce costs because for these cases, some cost reductions may already have been realized through application of the practices. The actual impact of these practices would likely fall somewhere in between the expectations of column 2 and the predictions of column 3.

The thirteen options listed in Table 35 can be grouped into six broader categories, as they have been in Table 36, which permits us to look at the larger pattern of responses.[73] To reduce discovery expenses, the highest percentage of attorneys would look to increased availability of judges to rule on discovery disputes and/or increased court management of discovery (63%) and controls on attorney conduct through sanctions and/or a civility code (62%). While a substantial number would also find certain rule changes helpful—for example, the 44% who said a uniform national rule requiring initial disclosure would reduce expenses and the 35% who said narrowing the scope of discovery would be helpful—changes in judge and attorney behavior clearly outweigh changes in the rules.

[73] An attorney who checked any item within the group is counted, but a single attorney cannot be counted more than once per group.

Table 36

Percentage of attorneys saying certain types of changes would likely reduce expenses without interfering with fair case resolution

Types of changes	% (N=1036)
Increasing court management/availability of judges to rule on discovery disputes	63
Increasing sanctions/adopting civility code	62
Numerical limits on time or amount of discovery	45
Adopt a uniform national rule requiring initial disclosure	44
Rule Change - scope of discovery	35
Delete initial disclosure from the national rules	31

B. The Most Promising Approach to Reducing Discovery Problems

After presenting the thirteen options above, we asked the attorneys to select the one approach that holds the most promise for reducing discovery problems. The choices focus on three key components of the discovery process: judges, attorneys, and rules of procedure. Of the nearly two-thirds of the attorneys who had an opinion on the subject, about half said judicial case management is the most promising approach to reducing problems in discovery (Table 37). The remaining half split about equally between revising the rules of civil procedure to further control or regulate discovery or changing client and/or attorney incentives regarding discovery. There were no significant differences in preference by type of party represented in the sample case, number of different discovery problems experienced in the sample

Table 37

Percentage of attorneys selecting each of three approaches as the most promising for reducing discovery problems

Approach	% (N=721)*
Increase judicial case management	47
Revise the Federal Rules of Civil Procedure to further control or regulate discovery	27
Address the need for changes in client and/or attorney incentives regarding discovery	26

* Note: Responses of "No opinion" (N=208) and "Other" (N=29) have been removed.

case, the type of client the attorney usually represents, type of law practice, or number of years in practice. When pressed to select the single most promising approach to reducing discovery problems, then, attorneys' clear choice is increased judicial case management.

C. Revisions to the Discovery Rules: The Desire for Uniform Rules

Apart from the question of whether any changes hold promise for reducing discovery problems, we explored attorneys' specific preferences for rule changes and uniformity in Rule 26(a)(1). Our questions focused first on the direction change might take and second on the timing of any rule revisions.

Table 38

Percentage of attorneys with specific preferences regarding types of uniform national rules

Attorney opinion	All	Plaintiff*	Defendant*
National rule requiring initial disclosure in every district	41	45	38
National rule with no requirement for initial disclosure and a prohibition on local requirements for initial disclosure	27	22	30
Allowing local districts to decide whether or not to require initial disclosure (status quo)	30	30	30
Other	2	2	2
Number of respondents	1112	504	608

* Differences between plaintiffs and defendants are statistically significant.

As to the direction of change, the results are mixed (Table 38). Faced with choice of uniform application of initial disclosure in all districts, uniform absence of initial disclosure, or the status quo, a plurality of attorneys in our sample (41%) support uniform application of initial disclosure. On the other hand, 27% favor a rule with no initial disclosure requirements and a prohibition on local requirements. Setting aside the specific substance of the rule, about two-thirds of attorneys, both plaintiffs' and defendants', favor some form of uniform national rule.

Another way to look at the data is to consider the 27% of attorneys who want to delete disclosure and the 30% who favor the status quo (the opt-out system)—in other words, a majority (57%) prefer something other than a uniform national rule requiring initial disclosure. We must take care, however, not to conclude from this that a majority

Table 39

Percentage of attorneys preferring certain types of uniform national rules, by participation in initial disclosure

Attorney opinion	Disclosure (N=503)	No disclosure (N=401)
National rule requiring initial disclosure in every district	52	28
National rule with no requirement for initial disclosure and a prohibition on local requirements for initial disclosure	22	31
Allowing local districts to decide whether or not to require initial disclosure (status quo)	23	38
Other	3	2

of attorneys oppose initial disclosure. Such a conclusion would rest on an assumption that those who favor the status quo disfavor initial disclosure requirements. In fact, 42% of those who favor the status quo are counsel in cases from districts that have implemented initial disclosure. Moreover, more than 40% of those who favor the status quo engaged in initial disclosure in the sample case. For these attorneys, initial disclosure is the status quo. A large proportion of those who favor the status quo, then, have experience with disclosure and do not oppose it (at least not enough to select that choice), but for some reason do not wish to impose a uniform national requirement on districts that have opted out of initial disclosure.

Attorneys who reported use of initial disclosure in the study case were considerably more likely (52%) to favor a uniform rule requiring initial disclosure than attorneys who did not report engaging in disclosure (28%) (Table 39). Attorneys who did not use initial disclosure in the sample case were almost as likely to favor initial disclosure as to favor prohibition of initial disclosure.

Of particular surprise, we found that many attorneys who reported problems with initial disclosure support a uniform national rule requiring disclosure, albeit not in so high a proportion as those experiencing disclosure generally. Of attorneys reporting initial disclosure problems, 47% favored uniform initial disclosure compared to 56% who did not report such problems.

We also found that attorneys in cases from districts that had opted out of initial disclosure were somewhat less likely than their counterparts to support a uniform national disclosure rule (35% of these attorneys) and were far more likely to prefer maintenance of the status quo (37%) (Table 40).

Table 40

Percentage of attorneys preferring certain types of uniform national rules, for attorneys in districts opting out and not opting out of initial disclosure

Attorney opinion	Opt-out (N=521)	No Opt-out (N=591)
National rule requiring initial disclosure in every district*	35	47
National rule with no requirement for initial disclosure and a prohibition on local requirements for initial disclosure	26	27
Allowing local districts to decide whether or not to require initial disclosure (status quo)*	37	24
Other	2	3

* These differences are statistically significant.

Overall, attorneys who represented plaintiffs in the sample cases were more likely to support initial disclosure (45% of them, compared to 38% of defendants' attorneys), while attorneys who represented defendants were more likely to support rules barring initial disclosure (30% of them, compared to 22% of plaintiffs' attorneys) (Table 38). Similarly, attorneys who in their overall practice primarily represent plaintiffs (50% of these attorneys) and attorneys who represent plaintiffs and defendants about equally (45%) were more likely than attorneys who primarily represent defendants (34%) to support initial disclosure.

Attorneys' preferences also differed by their practice setting. Solo practitioners (52%) and attorneys in firms of two to ten attorneys (46% of these attorneys) were more likely to support a uniform national disclosure requirement than those in firms of fifty or more attorneys (30%). Attorneys from the largest firms, in turn, were twice as likely to support a prohibition on initial disclosure (39%) than solo practitioners (20%) or those in firms of two to ten attorneys (19%).

These differences might be partially explained by the fact that attorneys in firms of fifty or more attorneys are far more likely to report practicing in four or more districts (45%) than those in firms of two to forty-nine attorneys (18%). Interestingly, though, a plurality of attorneys who practice in four or more districts support initial disclosure (42%) (Table 41). At the same time, these attorneys are more likely (39% of them) than attorneys who practice in fewer districts (21–32%) to support a prohibition on initial disclosure rules.

Table 41

Percentage of attorneys preferring certain types of uniform national rules, by number of districts in which they practice*

Attorney opinion (N=1105)	1 district	2–3 districts	4 or more districts
National rule requiring initial disclosure in every district	42	40	42
National rule with no requirement for initial disclosure and a prohibition on local requirements for initial disclosure	21	32	39
Allowing local districts to decide whether or not to require initial disclosure (status quo)	35	27	16
Other	3	2	4

* The distributions in this table are statistically significant.

From our sample of attorneys, the following general picture emerges regarding preferences for the national rules on initial disclosure. Most attorneys prefer a uniform national rule. A plurality of attorneys prefer a rule requiring initial disclosure. This group is disproportionately made up of attorneys who have experience with disclosure, who represent plaintiffs, who practice in a small number of districts, and who practice alone or in small firms. Even so, one would find in this group substantial numbers of other types of attorneys, as well—those who represent defendants, who practice in four or more districts, who practice in large firms, and surprisingly, who have had problems with initial disclosure.

D. The Timing of Rule Changes

While many attorneys favor revisions to the discovery rule, there is a split of opinion about the timing for such revisions (Table 42). A majority favors immediate change in the disclosure rules, but a substantial minority thinks change should not occur until there is more experience with the 1993 revisions.

A somewhat clearer picture emerges when we set aside the "no opinion" responses and combine some of the categories. Forty-three percent (43%) of the attorneys in this sample favor immediate changes in the uniformity provisions of the disclosure rules (Item 2 or 3, or both). More broadly, 54% think change of some sort, either in the disclosure rules or other rules, should take place now (Items 2, 3, or 4, or any combination). Finally, the broadest level of support—83% of

Table 42

Percentage of attorneys with various opinions on need for change in discovery rules at this time

Attorney opinion	%* (N=1101)
Changes are needed, but should not be considered until we have more experience with recent changes (1)	27
Changes in uniformity of initial disclosure practices (Rule 26(a)(1)) are needed now (2)	33
Changes in uniformity of expert disclosure practices (Rule 26(a)(2)) are needed now (3)	21
Other changes are needed now (4)	14
No changes are needed (5)	14
No opinion (6)	14

*Because respondents were allowed to choose more than one option, total adds up to more than 100%.

attorneys—is for some sort of change, either now or later (Items 1, 2, 3 or 4, or any combination).

We found no statistically significant differences regarding the timing of change for plaintiffs versus defendants, by type of primary client, or by numbers of years in practice. Practitioners in four or more federal districts were significantly more likely, however, than others to say that changes in initial disclosure are needed now and significantly less likely to have no opinion.

Those who experienced problems with discovery were more likely than those who had no problems to say other changes are needed (Item 4) and were less likely to have no opinion. Similarly, attorneys who experienced problems with initial disclosure were more likely to say changes in initial disclosure, as well as other changes, are needed now. They were also less likely to say they had "no opinion" on the subject.

While it is clear that substantial numbers of attorneys favor further rule changes—and that certain subsets of attorneys in particular favor changing the disclosure rules—it is important to keep in mind that judicial management is viewed by attorneys as the most promising single method for reducing discovery problems (Table 37).

V. Endnote

We began this Article by identifying four broad areas of inquiry: the volume and cost of discovery; problems associated with discovery

and the cost of these problems; the effects of the 1993 amendments; and the need, if any, for rule changes. Our findings about the effects of the 1993 amendments seem relatively straightforward and we see no need to summarize them here. Our discussion of the volume, costs, and problems of discovery, however, warrant attention because they seem to us less clear-cut and definitive.

We found a clear relationship between the volume of discovery activity in a case—as measured by total litigation expenses and discovery expenses—and the monetary stakes in the litigation. That is, as the stakes increase, the volume of discovery, and of discovery problems, also increases. To some extent, then, it appears that the amount of discovery and the frequency of problems is driven simply by the size of the case.

We also identified some case characteristics—the factual complexity of the case as seen by the parties, the contentiousness of their relationships with opposing party or counsel, and in some instances, the type of case—that appear more often in cases with discovery problems than in other types of cases.

The puzzle that remains is whether these case characteristics have any direct relationship to the volume of discovery and the frequency of discovery problems, or whether the size of the case alone explains both the volume of discovery and the frequency of discovery problems. One plausible hypothesis is that case size alone drives the volume of discovery and that such characteristics as contentiousness are a result of size. Another is that relationships that are already contentious at the outset of the litigation result in cases with large stakes, a high volume of discovery activity, and more discovery problems. We hope identification of these variables as factors in the equation will help frame issues for future research.

For the present, the case characteristics revealed by our study—stakes, complexity, contentiousness, and case type—may not help very much in predicting exactly where discovery problems will arise, but they may help inform judges and policymakers about what to look for when managing an individual case or when deciding whether to change the rules of civil procedure.

APPENDIX

METHODS

Sample size

Based on an earlier survey of attorneys, we estimated that about 10% of the respondents might identify problems with discovery.[74] Anticipating a response rate of 50%, a sample of 2000 attorneys would yield about 1000 responses and approximately 100 problem responses.[75] Therefore, a sample of 1000 cases was drawn.

As it turned out, the response rate approached 60%,[76] and more than 40% of the attorneys reported some problems with discovery in response to a broad inventory of suggested possible problems. This relatively high rate of identification of problems, however, should not be taken to mean that problems with discovery have increased since the earlier survey. The methods used to identify problems were likely to yield results that are not comparable. In the present study, we sought a comprehensive inventory of problems in four major forms of discovery, and we provided a list of potential problems to assist the respondent in identifying such problems, whereas in the previous study, respondents were asked to generate a written response without a list of possible problems.

Population sampled from

The survey does not purport to cover discovery in all federal civil cases, but instead to cover discovery in general civil litigation in which some discovery activity is reasonably likely. The population of cases sampled from was drawn from all civil cases terminated in the district courts during the last quarter of 1996 (the most recent data then available). For practical reasons, we excluded the eight districts (accounting for 3% of the total district court civil case population) from which we could not electronically access docket data.[77]

---

[74] In the previous survey, about 8% of counsel mentioned discovery problems in written responses to a question asking about the causes of excessive cost or delay in their case. The survey was done as part of the Federal Judicial Center's most recent district court time study.

[75] Surveys were sent to 2016 attorneys; subsequently, 16 attorneys in nine cases were excluded from the study because they reported that their case was pending.

[76] Attorneys returned 1178 questionnaires. Of those, 31 attorneys returned blank surveys and indicated that no discovery had occurred in their case. For those attorneys, we entered data indicating an absence of discovery.

[77] These districts may be systematically different from the districts included in the study.

The following types of cases were excluded as not encompassed in the common understanding of general civil litigation or as not likely to involve any discovery: loan collection, prisoner, land condemnation, foreclosure, bankruptcy, drug-related property forfeiture, social security, and asbestos product liability cases (because they are consolidated in an MDL proceeding). We also excluded breast implant cases disposed of in the Northern District of Alabama (about 7% of the total case population for the period) owing to the atypical and highly managed discovery that occurs in mass tort multidistrict proceedings and because the termination of the cases in the Northern District of Alabama did not represent a final resolution of those cases.

We also excluded all cases that were disposed of by default judgment before issue was joined, as well as cases whose termination in the district court is by definition not a final resolution. The latter group was comprised of cases remanded to a state court or to an agency and cases transferred to another district. Finally, we excluded cases that were terminated less than sixty days after their original filing in district court (about 8% of the total case population) on the assumption that very few such cases involve any discovery.

Overall, the population sampled accounts for about 45% of civil cases filed in the district courts, or vice versa, cases excluded from consideration account for about 55%.

Representativeness of the responses

In the sample cases, 47% of the attorneys represented plaintiffs[78] and 53% represented defendants, including third party defendants. Among those who responded, 46% represented plaintiffs and 54% represented defendants. We also asked respondents what types of clients they generally represent and found that 28% represent primarily plaintiffs, 44% represent primarily defendants, and 27% represent plaintiffs and defendants about equally. We present data separately for attorneys for plaintiffs and defendants—based on the client represented in the sample case—when there are notable differences in their responses.

Responding attorneys, on average, devoted 41% (median=30%) of their work time during the past five years to federal civil litigation. The majority (51%) practice primarily in one federal district, but 39%

[78] The sample included a number of pro se plaintiffs and a smaller number of pro se defendants. In selecting the sample cases, we tried not to include those with pro se parties. Nonetheless, some pro se litigants made it into the sample, but their responses are not included in the analysis reported here.

practice in two or three federal districts and 10% practice in four or more federal districts.

The majority practice in firms of two to forty-nine attorneys; 20% are from firms of fifty or more attorneys; 12% are sole practitioners; and 8% are government attorneys. On the average, these attorneys have practiced law for sixteen years; 75% have practiced law for at least ten years.

We compared the cases underlying the responses with the cases in the original sample and found the responses to be representative of the sample as a whole. In both sets, there were no substantial differences in types of cases or their life spans (from filing to disposition), and the methods of disposition, whether by trial, settlement, motion, or otherwise, were substantially equivalent.

We specifically examined the disclosure rules in place in various districts in the sample. Response rates were almost identical from districts with initial disclosure, from those without initial disclosure, and from districts with variations of disclosure and nondisclosure.

Data analysis

Data analysis was based on a combination of bivariate and multivariate statistics. Bivariate statistics included the Pearson correlation coefficient where noted and otherwise involved either Chi-square tests of differences between pairs of variables or t-tests of the differences in the means of two variables. As described in the text and accompanying notes, multivariate analyses were conducted using multiple regression and survival analysis.